Bioscience 2011-2012 Bioscience Colorado

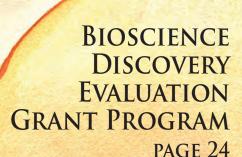
BRIDGING THE GAP:

FROM DISCOVERY TO COMMERCIALIZATION



VISUALIZING THE GAP PAGE 6

COLORADO BY THE NUMBERS: 2011 UPDATE PAGE 11



OF BIOSCIENCE COMPANIES AND RESOURCES PAGE 42

Fitzsimons Life Science District a great place to raise an idea

Located in Aurora, Colorado, it's one of the largest bioscience developments in the country, a place where there's plenty of room to grow an idea from discovery to market viability. Whether you start in the bioscience incubator or move into a state-of-the art lab facility, everything you need is close at hand. A cluster of talent and resources is available to you, including direct access to the more than 80 core

laboratories at the University of Colorado Anschutz Medical Campus – all just steps away. Features throughout the district, such as parks and conference facilities, are designed to inspire collaboration. And a nearby mix of shops, restaurants and homes let your people thrive right along with your ideas.

colorado science + technology park at fitzsimons









Improve the health of your business.

Collaborations between bioscience companies and faculty researchers at the University of Colorado Anschutz Medical Campus are flourishing. Which means the opportunities for improvement—in the health of Coloradoans and in the health of your business—are excellent.

With 2,000 of the nation's best and brightest researchers, 22 new core labs, onsite affiliate hospitals, and 227 acres of state-of-the-art patient care, research and education, the Anschutz Medical Campus provides unique opportunities for business development. The University's Technology Transfer office, ranked among the top 20 universities for creating start-up companies, creates a pipeline to success— with almost \$3 billion generated for the economy between 2002-2010. Just ask

successful Colorado companies such as Myogen/ Gilead Sciences Colorado, GlobeImmune, ARCA, and ApopLogic Pharmaceuticals. And with Denver International Airport being only 15 minutes away, access to both coasts takes only a few hours.

Contact us today—and let us research new business solutions for you.













Looking for a place to locate a bioscience company?

Put us under the microscope.



Metro Denver is home to some of America's top university laboratories and research centers including the country's largest medical-related development — the \$5.2 billion Fitzsimons Life Science District and the adjacent Anschutz Medical Campus. We are the bioscience center of the Rocky Mountain West, offering companies access to knowledge workers, venture capital, and incubators. Not to mention an enviable lifestyle that helps retain our highly-skilled workforce. Examine us closely at www.metrodenver.org/bioscience. You'll find that Metro Denver is well positioned for the future of bioscience.

Bloscie Colorado

elcome to the Colorado BioScience
Association's seventh edition of Bioscience
Colorado, the state's only in depth guide
and directory to the bioscience industry.
This publication is an integral part of the
Association's mission to support the regional
bioscience community through advocacy,
resources and advancement of opportunities
for collaboration.

With a printed circulation of 6,000 and over 10,000 on-line impressions, this publication is one of our industry's greatest voices locally, nationally and internationally. This year's issue of Bioscience Colorado takes a closer look at the process from discovery to commercialization. As we explore each step of a company's lifecycle it is clear that Colorado has the drive and dedication to succeed!

Holli Baumunk

Fresident and CEO

Colorado BioScience Association

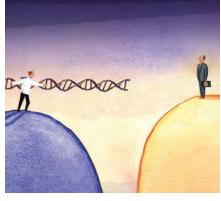
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DIRECTORY OF BIOSCIENCE COMPANIES AND RESOURCES

BIOSCIENCE COLORADO 2010/2011

Visualizing the Gap

Discovery

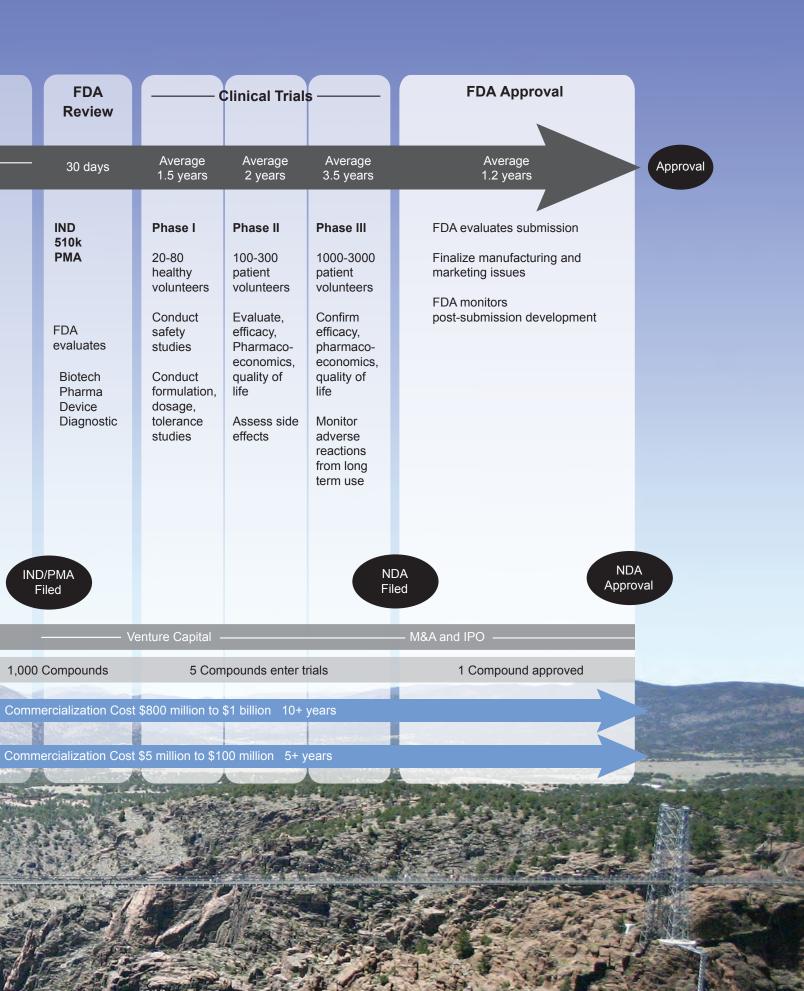
Time/

Average 6.5 years Tech Transfer **Business Development Assets** Synthesize Chemical Compound Office disclosures • CID4 FBBp Determine Formulation, Develop Apply for Patent **Delivery Technology** · Larimer Bioscience Cluster CBSA **Conduct Preclinical** Rocky Mountain Innosphere Laboratory/Animal Studies **Research & University Assets** Pharmacology Pharmacokinetics CIMB • C2D2 **Device Prototyping** · Advanced Diagnostics Labs - Nat'l Jewish **Device Quality Systems** • Biochem Genetics Lab Dept Pediatrics, UC Denver **Device Manufacturing** • Ctr for Genetics & Therapeutics Lab, Nat'l Jewish CO Genetics Lab Dept Pathology, UC Denver • DNA Diagnostic Lab UC Denver · Genomics Proteomics Core Rocky Mtn Reg Center of Excellence · High Throughput Sequencing Core Consortium for Comparative Genomics · Morphology and Phenotyping Core Gates Regenerative Medicine Mycobacteria Research Labs CSU · Network of Translational Technologies, CO Clinical Trials & Translational Svc Inst. The Carl and Hazel Felt Lab for Pulmonary Research National Jewish Qualifying Therapeutic Discovery Projects, Boetcher Webb-Warning Biomedical Grants & Bioscience Discovery Evaluation Grant Program **Financing** Government Grants Biotech 10,000 Compounds Discovery Biotech/Pharma Average Discovery to Cost to Market Device/Diagnostic Average Discovery to Colorado's Royal Gorge Bridge, the world's highest suspension bridge

Valley of Death

(CO Sherpas)

Preclinical Development



DISCOVERY TO DEVELOPMENT:

THE STORY OF TECHNOLOGY TRANSFER

BY ANDREA PAWLICZEK

he link between the research going on inside university walls and the development conducted by the entrepreneurial community may seem to be a natural one, especially in the bioscience arena. University investigators engage in leading-edge research while entrepreneurs need innovative ideas to create products that solve the most challenging medical problems and promise to provide value in the marketplace. Although the connection may seem natural, the transfer of technology from university research to the commercial marketplace logistically represents a far from trivial challenge.

Prior to 1980, the government held rights to inventions generated from government-sponsored research including National Institute of Health (NIH) grants. Although the government held about 28,000 patents at this time, only about five percent were licensed to industry. This woeful record of commercialization led to the 1980 Bayh-Dole Act, which passed the responsibility to commercialize inventions to the universities and teaching hospitals where the research was conducted. This led to the formation of Technology Transfer Offices (TTOs) within these institutions.

The original mission of TTOs was relatively simple — help research institutions get patents based on researchers' work, then license those patents to companies for a fee.

This mission has broadened substantially over time with TTOs helping faculties address the challenges of an increasingly complex marketplace.

David Allen, Ph.D., Associate Vice President for Technology Transfer at the



- Colorado School of Mines Technology Transfer Office
- Colorado State University Ventures (CSUV) & The Colorado State University Research Foundation (CSURF)
- National Jewish Technology Transfer Office
- · University of Colorado Technology Transfer Office
- The University of Colorado-Boulder's Colorado Initiative in Molecular Biotechnology
- University of Denver Technology Transfer Office

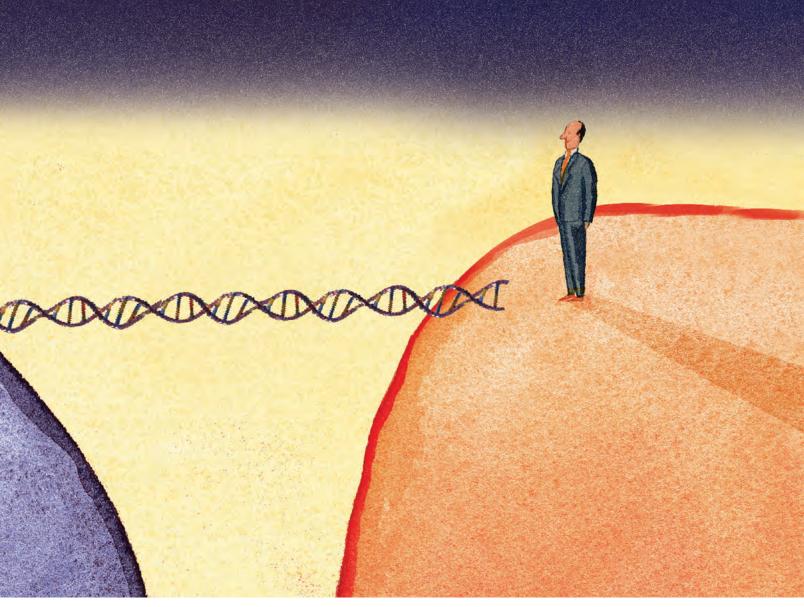
University of Colorado (CU), calls strong science a "necessary but not sufficient condition" to technology commercialization. According to Allen, "research funded by the NIH does a great job of pushing the envelope of scientific knowledge." But it is far from a straight-line path from this research to the marketplace. Among the many challenges, researchers must zero in on the most promising commercialization options and consider the different paths toward commercialization, including licensing the technology to an existing company, conducting further research to put the idea in a more market-ready position, or forming a new startup company. The staff of the TTO serves a key role in helping researchers evaluate these alternatives.

Other organizations sometimes partner with TTOs to support evaluation and commercialization. The Boulder Innovation Center (BIC), for example, supports technologies from both the Colorado School of Mines (CSM) and CU. Most recently, the BIC has supported a medical device with a compound that can be used to create artificial bone developed at CSM.

Once the desired path is identified, the key roadblock is often funding. Bioscience companies face the dreaded "valley of death" — a point where research may be beyond the fundamental science funded by the NIH but is not yet ready for traditional investment from venture capitalists. Universities around the state have developed unique approaches to helping companies cross this valley both through direct funding and coordination of funding sources to make sure companies are in the best position to gain access to other funds.

The CU TTO offers Proof of Concept (PoC) grants and investments that provide \$10,000 to \$200,000 to advance research down the road to commercialization. A

8 2011/2012 BIOSCIENCE COLORADO



success story from this program is Taligen Therapeutics. The technology behind Taligen was developed by researchers at CU Denver and National Jewish Health. The company received the CU TTO's inaugural Proof of Concept investment in 2004 which provided the leverage to secure additional commercial financing. Taligen was acquired by Alexion for \$111 million (upfront cash payment of \$111 million additional contingent payments earned upon reaching various clinical efficacy and product approval milestones) in January 2011.

More recent beneficiaries of this program, include Dr. Kathryn Holmes and Dr. Robert Hodges, professors at the CU School of Medicine. Holmes and Hodges used NIH funding to "identify a good strategy to inhibit the entry of the coronavirus, which causes SARS," says Holmes. After the outbreak of SARS was controlled by coordinated global public

health measures, the researchers realized that the synthetic peptide strategy that they had developed might also be effective against a variety of other viruses, including influenza. Importantly, their research targeted a highly conserved region of the flu's HA glycoprotein, offering the potential for a universal flu vaccine different from current vaccines, which are only able to target a few selected strains and must be reformulated each year as viral mutants replace previously circulating virus strains.

The duo, however, did not have NIH funding to pursue this influenza research. Through a grant from the CU TTO PoC program, they were able to conduct pilot experiments that proved their protein strategy was effective against influenza virus. After this success, the research was spun out into a startup company, PeptiVir. Yet the company needed additional funds at this point, and the TTO "made sure we were aware of and

helped us connect with the funding options available," Holmes says.

PeptiVir was one of the first two companies selected to participate in the Colorado Institute for Drug, Device, and Diagnostic Development (CID4), a program that supports emerging life-science companies. The company also received additional funds from Colorado's Bioscience Discovery Evaluation Grant Program (BDEGP) to target another important respiratory virus. Holmes views the support from the TTO and CID4 as invaluable in getting the research to this point. "As biomedical scientists, we always dream of creating something useful for human health, but we are just not taught much about commercialization," she says. "CID4 and the TTO help us and others to bridge the gap from discovery to development of new therapies."

Colorado State University (CSU)

has developed another unique approach in Superclusters, which are designed to speed research to the market. With three Superclusters, CSU has in-house business advisers who provide advice that aids technology development across a variety of stages. Two Superclusters fall squarely in the bioscience arena — MicroRx, focused on infectious disease, and NeoTREX, focused on cancer. The third Supercluster, Cenergy is focused in the clean energy space.

The Supercluster experts "proactively and reactively work with faculty to identify invention 'moments' and get the process in the right order to protect IP," says Terry Opgenorth, Executive Director of NeoTREX. As technology progresses, support continues with active "industry engagement on licensing and research collaboration opportunities," Opgenorth continues. Sometimes advisers serve as "executives in residence' with CSU startup companies, providing invaluable guidance on how to move from the academic environment to the business environment."

Notable bioscience companies that have

worked with the Superclusters include Solix Biofuels and Advanced Microlabs. Solix Biofuels is working on a scalable method to cultivate oil-rich microalgae for a variety of biofuels and chemical intermediaries. Early in its history, the company partnered with researchers at CSU to identify and optimize algae strains to maximize oil production. The Company went on to raise a \$16.8 million Series A round in 2009 from several prominent cleantech investors. With this funding, the company has created a first-ofits-kind demonstration facility in Durango, CO to optimize its technology on a large scale. Solix remains a corporate partner of Cenergy.

Advanced Microlabs, which originally licensed technology from CSU in 2003, is currently engaged in developing novel methods to test water purity for the power-generation industry. The Company received a \$995,000 grant in January from the NIH Superfund Research Program and the National Science Foundation to push this technology toward commercialization. CSU Professor of Chemistry, Charles Henry serves as CEO of the company. Advanced Microlabs

is headquartered at the Research Innovation Center, a facility on the CSU campus designed to promote collaboration between the university and private sector.

Allen of CU notes that one of the most substantial influences TTOs can have is creating serial inventors. Once a scientist has seen the process of commercialization through, they start actively assessing their research to illuminate other potential commercial applications and evaluating the best experiments to validate each idea.

Dr. Linda Watkins, a Distinguished Professor in the Department of Psychology & Neuroscience and Center for Neuroscience at CU-Boulder, has found several avenues to apply her research on glial cells. These cells surround neurons and play an important role in amplifying pain but are ignored by current pain management therapies. The first startup company based on her research, Xalud Therapeutics, is pursuing a non-viral gene therapy (XT101) that "completely reverses pain in rats for three months by driving production of a natural protein that calms down the glial cells," Watkins says.

She also connected with an existing therapeutics company to test a compound, ATL313, which is capable of transforming glial cells from activated to basal states. In testing in rats to evaluate the drug's efficacy in reducing chronic pain from multiple sclerosis, the compound stopped the progression of MS-caused paralysis, a finding Watkins wants to investigate further.

Finally, Watkins, CU-Boulder Professor Hubert Yin, and Professor Tarek Sammekia and Kenner Rice at the National Institute of Drug Abuse are aiming to optimize new molecules that block the activation of glial cells. BDEGP state funding will allow the team to "complete the ongoing structure-activity relationship studies and in vivo animal tests, thereby identifying pharmacophore for further drug development," according to Yin. The group hopes to license the research to a pharmaceutical company or form a new startup.

The benefits that accrue when researchers become engaged in the commercialization process reach far beyond any specific research pursuit. As Holmes of the CU School of Medicine says, "Now we are able to encourage our students and colleagues to consider various pathways to commercialization when opportunities arise in their own research."

CRB is a global provider of end-to-end solutions for life science and advanced technology companies. Our solutions deliver enhanced value, productivity and return on investment. Whether you are across town or across the pond, CRB's consulting, design and construction expertise will meet your R&D and manufacturing needs, while adding some black to your bottom line.









Jason Robertson

303.993.1836 jason.robertson@crbusa.com www.crbusa.com



Consulting

Design

Construction

Commissioning

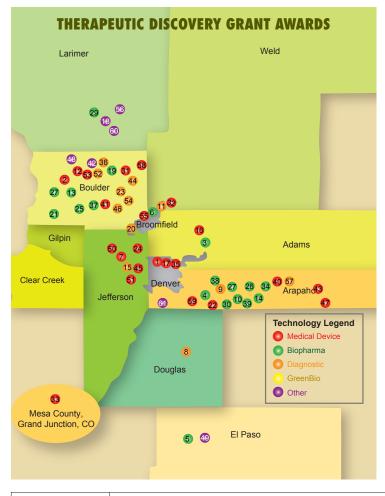
Qualification

2011/2012 BIOSCIENCE COLORADO

COLORADO BY THE NUMBERS:

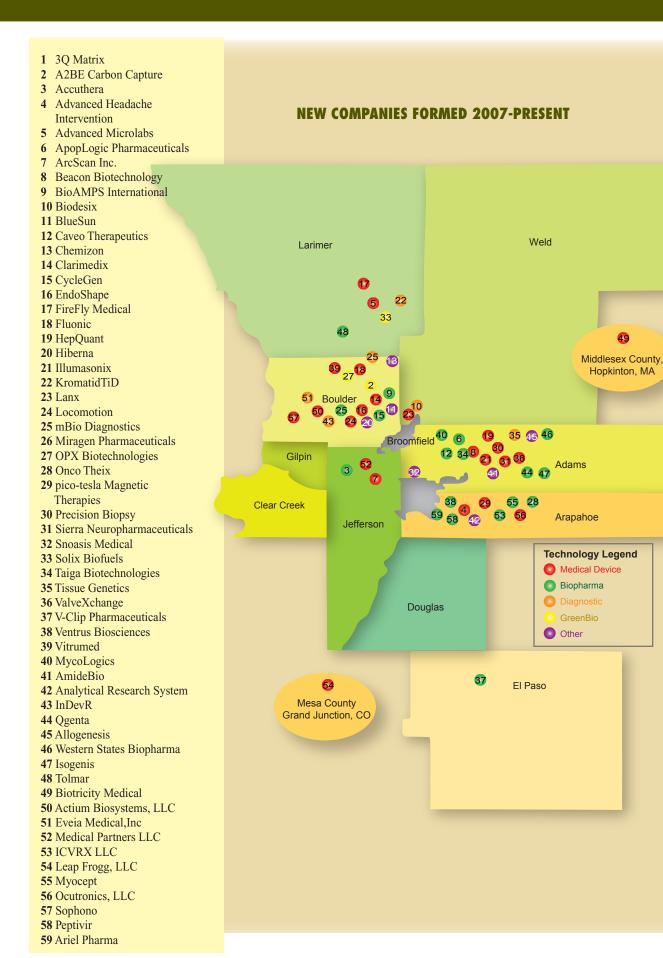
A 2011 UPDATE ON COLORADO'S GROWING BIOSCIENCE INDUSTRY

n 2009 the Internal Revenue Service, in conjunction with the Department of Health and Human Services, approved applications for the Qualifying Therapeutic Discovery Bioscience Project Program, from applicants who demonstrated significant potential to produce new therapies to treat areas of unmet medical need or to prevent, detect or treat chronic or acute disease and conditions, significantly advance the goal of curing cancer within thirty years, and/or reduce the long-term growth of healthcare costs in the U.S. Under the program, a total amount of \$1 billion was allocated for credits and grants with a \$5 million limit per each eligible applicant. Over sixty Colorado-based life science entities qualified for and received nearly \$25M in Therapeutic Discovery Grant awards, with amounts ranging from \$60,000 to over \$1,400,000.



	Company	2009	2010
1	Accelr8 Technology Corporation	\$244,479	\$0
2	Actium Biosystems, LLC	\$0	\$244,479
3	Allos Therapeutics, Inc	\$1,466,875	\$0
4	ApopLogic Pharmaceuticals, Inc	\$306,732	\$0
5	Aqueous Biomedical Inc.	\$70,737	\$155,000
6 7	ARCA Biopharma Inc ArcScan, Inc.	\$488,959 \$244,479	\$0 \$0
8	AspenBio Pharma Inc	\$244,479	\$0
9	Beacon Biotechnology LLC	\$180,127	\$64,352
10	BioAMPS International, Inc	\$0	\$183,913
	Biodesix Inc	\$844,318	\$354,617
	BiOptix Diagnostics, Inc.	\$227,575	\$16,904
	Bolder Biotechnology Inc.	\$326,913	\$865,232
	Cell Point CeMines Inc	\$244,479 \$197,726	\$0 \$0
	Cerapedics Inc	\$733,438	\$0
	CereScan Corp	\$244,479	\$0
	Chata Biosystems, Inc	\$67,800	\$176,680
19	Clovis Oncology Inc	\$244,479	\$244,479
	Corgenix Medical Corporation	\$26,250	\$72,500
	Crestone, Inc	\$46,133	\$199,725
	EndoShape, Inc	\$191,838	\$209,035
	Eveia Medical,Inc Generations Medical Partners LLC	\$0	\$244,479
	Globelmmune, Inc.	\$0 \$730,828	\$244,479 \$2,610
	Greffex, Inc	\$244,479	\$2,010
	Hiberna Corporation	\$63,551	\$33,592
	ICVRX LLC	\$0	\$244,479
	Inviragen, Inc	\$357,493	\$131,466
	Isogenis, Inc	\$244,479	\$0
	Kestrel Labs, Inc	\$244,479	\$0
	Lanx, Inc.	\$119,000	\$125,479
	Leap Frogg, LLC MBC Pharma Inc	\$189,970 \$244,479	\$54,510 \$0
	Micro-Imaging Solutions LLC	\$244,479	\$0
	MicroPhage Inc	\$488,958	\$0
	Miragen Therapeutics, Inc.	\$244,479	\$0
	Myocept, Inc	\$78,224	\$166,255
	N30 Pharmaceuticals, LLC	\$0	\$244,479
	Ocutronics, LLC	\$76,411	\$168,068
	Otologics, LLC	\$244,479	\$0
	Parascript, LLC PARE Surgical, Inc.	\$244,479 \$127,457	\$0 \$117,022
	Pathogen Systems d/b/a Crystal Dx	\$244,479	\$117,022
	PharmaJet Inc	\$91,876	\$152,603
	Precision Photonics Corp dba mBio I		\$0
47	ProFoldRx, Inc dba BaroFold, Inc	\$0	\$244,479
	Protectstyle Corporation	\$0	\$244,479
	Pyxant Labs Inc	\$0	\$98,733
	Quest Product Development Corp	\$488,959	\$0
	Rocky Mountain Biosystems, Inc. Somalogic Inc	\$273,760 \$1,439,985	\$0 \$465,382
	Sophono Inc	\$82,121	\$162,358
	Source MDx	\$527,795	\$205,643
	St Cardio Technologies	\$186,139	\$58,341
56	St. Renatus LLC	\$244,479	\$0
	Sundance Diagnostics, Inc	\$244,479	\$0
	Surefire Medical, Inc.	\$12,576	\$231,903
	ValveXchange, Inc	\$244,479	\$0
	Ventria Bioscience Vitrolife Inc	\$389,918 \$244,479	\$281,541 \$0
	otal	\$15,790,024	\$6,709,299
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BIOSCIENCE COLORADO 2011/2012

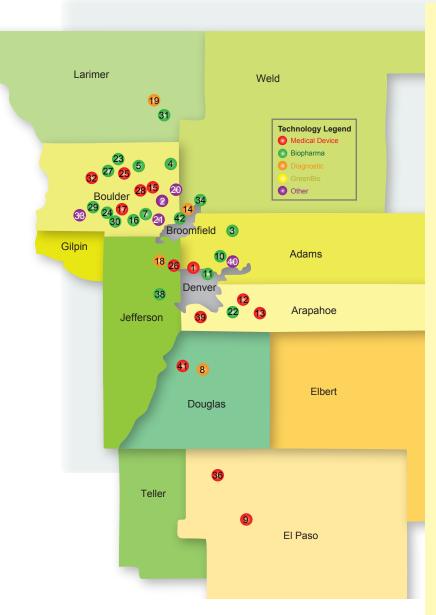


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INSTITUTIONAL FINANCINGS 2007 TO PRESENT						
CC	MPANY	ROUND/EVENT	VALUE (\$M)			
1	Accera Series	С	\$35.0			
2	AllosTherapeutics Secon	nday \$65.2				
	Allos Therapeutics	Secondary	\$50.5			
3	ARCA biopharma	Series B	18.0			
4	Array Biopharma	Debt + Warrants	\$80.0			
5	Aspen BioPharma	Secondary	\$18.2			
6	BaroFold	Series A	\$12.0			
7	Biodesix	Series B	Undisclosed			
8	BiOptix	Series B	Undisclosed			
9	CeraPedics		\$12.3			
10	Evolutionary Genomics	Series	A \$5.0			
11	GlobeImmune	Series C	\$41.2			
	IBalance Medical	Series A	\$13.5			
13	Illumasonix	Series A	Undisclosed			
14	Lanx	Series A	\$25.0			
	MD-IT	Series B	\$11.0			
	Microphage	Series A	\$11.0			
17	U	Series A	\$8.0			
	N30 Pharma	Series A	Undisclosed			
	OPX Biotechnologies	Series A	\$3.6			
	OberonFMR Series A	\$1.0				
	Precision Biopsy	Series A	Undisclosed			
	Range Fuels	Series B	\$130.0			
	Sierra Neuropharma	Series A	\$21.5			
	SomaLogic	Series D	\$35.0			
	Taligen Therapeutics	Series B	\$65.0			
	TheraTogs	Series A	\$1.1			
	Luca Technologies	Series C	\$76.0			
	Medivance	Series E	\$8.1			
	Clovis Oncology	Series A	\$146.0			
	OPX Biotechnologies	Series B	\$17.5			
	CeraPedics	Series B	\$14.5			
	BiOptix	Series A	\$3.0			
33		Seed	Undisclosed			
	GlobeImmune	Series E	\$17.5			
	GlobeImmune	Milestone payment	\$40.0			
	Inviragen	Series A	\$15.0			
37	Sharklet	Series A	\$1.5			
38		Series A2 Debt + Warrants	\$ 4.0			
39	Array Biopharma BioAMPs		\$40.0			
40		Seed	\$0.1 \$93.0			
		Secondary Secondary				
	AspenBio Pharma Accera	Series D	\$8.7			
	SomaLogic SomaLogic	Series E	\$11.0 \$15.0			
	Biodesix	Series E Series C	\$7.1			
	GlobeImmune	Series E	\$17.5			
	N30 Pharma	Series B	\$17.5			
7/	Sub-total Capital Rais		\$1,788.1			
48		Acquired	\$80.0			
49		Acquired	\$1,100.0			
	Pharmion	Acquired	\$2,900.0			
51		Acquired	\$2,500.0			
	RxKinetix	Acquired	\$115.0			
53		Acquired	\$130.0			
33	1.1		\$6,825.0			
	Sub-total Exits Total Capital Infused to Colorado		\$8,613.1			
	Total Capital Illiuscu	to Colorado	Ψυ, υ13.1			



BIOSCIENCE COLORADO 2011/2012



COLORADO-BASED AND RELATED PUBLIC COMPANIES

	1 13211 101111	
1	Accelr8 Technology	AMEX: AXK
2	Agilent Technologies	NYSE: A
3	Allos Therapeutics	NASDAQ: ALTH
4	Alpharma Animal Health/ King Pharma	NYSE: KG
5, 6	Amgen	NASDAQ: AMGN
7	Array Biopharma	NASDAQ: ARRY
8	AspenBio Pharma	NASDAQ: APPY
9	B2 Health	NASDAQ: BTWO
10	BioNovo	NASDAQ: BNVI
11	Ceragenix Pharmaceuticals	OTC BB: CGXP.OB
12	Cochlear Americas	ASX: COH
13	Conmed	NASDAQ: CNMD
14	Corgenix Medical	NASDAQ: CONX.OB
15	Covidien	NYSE: COV
16	Dharmacon/	NYSE: TMO
	Thermo Fischer Scientific	
17	Encision	NASDAQ: ECIA.OB
18	GeneThera	NASDAQ: GTHR.PK
19	Heska	NASDAQ: HSKA
20	Hospira	NYSE: HSP
21	InB:Paxis / Hauser CRO/ Integrated BioPharma	NASDAQ: INBP
22	Inhibiton Therapeutics	NASDAQ: IHBT
23	Insmed	NASDAQ: INSM
24	Martek Biosciences	NASDAQ: MATK
25	Medtronic	NYSE: MDT
26	Mesa Labs	NASDAQ: MLAB
27	Myogen/Gilead	NASDAQ: GILD
28	OrthoNextx	NASDAQ: ANTX.OB
39	OSI Pharmaceuticals	NASDAQ: OSIP
30	Pharmion/Celgene	NASDAQ: CELG
31	QLT	NASDAQ: QLTI
32	Replidyne/	NASDAQ: RDYN
	CardioVascular Systems	
33	Roche Colorado	VTX: ROG.VX
34	Sandoz	NYSE: NVS
36	Spectranetics	NASDAQ: SPNC
38	The Sorin Group	MTAX: SRN.MI
39	VitroLife	SEK: VITR
40	Xelr8 Holdings	AMEX: BZI
41	Zynex	NASDAQ: ZYXI.OB
42	ARCA biopharma	NASDAQ:ABIO

2011/2012 BIOSCIENCE COLORADO

COLORADO RECENT FINANCINGS JANUARY 2011

Green-Bio ■ Biopharma ■ Medical Device ■ Diagnostic ■ Other

	COMPANY	CITY/ZIP	ROUND/EVENT	VALUE (\$M)	TECHNOLOGY/PRODUCT
1	Accera	Broomfield / 80021	Series C	\$35.00	Medical Foods CNS
2	Allos Therapeutics	Westminster / 80020	Secondary	\$65.20	Small molecule THx Oncology
3	Allos Therapeutics	Westminster / 80020	Secondary	\$50.50	Small molecule THx Oncology
4	ARCA biopharma	Broomfield / 80021	Series B	\$18.00	Small moleculer THx Cardiovascular
5	Array Biopharma	Boulder / 80301	Debt + Warrants	\$80.00	Small molecule THx Oncology
6	Aspen BioPharma	Castle Rock / 80104	License Agreement	Undisclosed	Protein THx and Dx Reproduction, Appendicitis
7	Aspen BioPharma	Castle Rock / 80104	Secondary	\$18.20	Protein THx and Dx Reproduction, Appendicitis
8	Arterain Medical	Atlanta / 30313	Series A	Undisclosed	
9	BaroFold	Boulder / 80301	Series A	\$12.00	Protein THx Immunologic disorders
10	Biodesix	Broomfield / 80021	Series B	Undisclosed	Dx Platform Oncology
11	BiOptix	Boulder / 80301	Series B	Undisclosed	Dx Platform Infectious Diesease
12	Ceragenix	Denver / 80202	Milestone payment	\$1.00	Medical Device Infectious Disease
13	Ceragenix	Denver / 80202	Milestone payment	\$1.50	Medical Device Infectious Disease
14	CeraPedics	Broomfield / 80021	Series A financing	\$12.30	Medical Device Bone Graft
15	Evolutionary Genomics	Lafayette / 80026	Series A	\$5.00	Biofuels Greentech
16	GlobeImmune	Louisville / 80027	Series C	\$41.20	Discovery and development of potent, targeted molecular immunotherapies
17	iBalance Medical	Boulder / 80301	Series A	\$13.50	Medical Device Orthopedic
18	Illumasonix	Aurora / 80045	Series A	Undisclosed	Dx Platform Cardiovascular
19	Lanx	Broomfield / 80021	Series A	\$25.00	Medical Device Orthopedic
20	MD-IT	Boulder / 80301	Series B	\$11.00	Telemedicine Electronic Records
21	MedShape Solutions	Atlanta / 30318	Series A	Undisclosed	
22	Microphage	Longmont / 80503	Series A	\$11.00	Dx Platform Infectious Diesease
23	Miragen	Boulder / 80301	Series A	\$8.00	miRNA Cardiovascualr
24	N30 Pharma	Boulder / 80301	Series A	Undisclosed	Small molecule THx Respiratory
25	OPX Biotechnologies	Boulder / 80301	Series A	\$3.60	Biofuels Greentech
26	OberonFMR	Idaho Springs / 80452	Series A	\$1.00	Biofuels Greentech
27	Precision Biopsy	Aurora / 80045	Series A	Undisclosed	Dx Platform Oncology
28	Range Fuels	Broomfield / 80021	Series B	\$130.00	Biofuels Greentech
29	Sierra Neuropharma	Aurora / 80045	Series A	\$21.50	Small molecule THx CNS
30	SomaLogic	Boulder / 80301	Series D	\$35.00	Dx Platform Various Diseases
31	Taligen Therapeutics	Aurora / 80045	Series B	\$65.00	Protein THx Inflammation
32	TheraTogs	Telluride / 84135	Series A	\$1.10	Medical Device Orthopedic
33	Luca Technologies	Golden / 80401	Series C	\$76.00	Biofuels Greentech
	Accera	Broomfield / 80021	Series D	\$11.00	Medical Foods CNS
	SomaLogic	Boulder / 80301	Series E	\$15.00	Dx Platform Various Diseases
	Biodesix	Broomfield / 80021	Series C	\$7.10	Dx Platform Oncology
37	GlobeImmune	Louisville / 80027	Series E	\$17.50	Discovery and development of potent, targeted molecular immunotherapies
38	N30 Pharma	Boulder / 80301	Series B	\$17.50	Small molecule THx Respiratory
	Total Capital Raises			\$809.70	
-20	Dhama	I - f	A 1	000.00	DN(4.1
39	Dharmacon	Lafayette / 80026	Acquired	\$80.00	RNAi oligos
40	Sirna	Boulder / 80301	Acquired	\$1,100.00	RNAi THx Oncology
	Pharmion	Boulder / 80301	Acquired	\$2,900.00	Small molecule THx Oncology
	Myogen PyVinativ	Boulder / 80301	Acquired	\$2,500.00	Small molecule THx Cardilogy
43	RxKinetix	Louisville / 80027	Acquired	\$115.00	Small molecule THx Oncology
	Total Exits			\$5,515.00	
	TOTAL PARTS			φ5,515.00	
	TOTAL Capital infused	to Colorado		\$6,324.70	
	- P			,	

BIOSCIENCE COLORADO 2011/2012

Weaving a Web of Support and Guidance

BY CASEY DEMCHAK

reating a successful bioscience company isn't for the faint of heart. What is required is a tremendous amount of guts, determination, money, and most importantly — great science. Combining these elements into a strong asset and taking it from the lab to clinical trials and on to market launch is no simple task. It requires crossing a chasm or "valley of death" that can drain the life from promising new technologies.

Here in Colorado, through a collective effort involving state government and a web of highly dedicated institutions, there is an amazing array of work being done with the shared goals of helping young companies thrive and further developing the state's bioscience industry and overall economy.

EARLY-STAGE SUPPORT

Early-stage drug discovery is being assisted by the University of Colorado's Colorado Initiative in Molecular Biotechnology (CIMB), which is developing the Integrated Novel Therapeutic Discovery Center (INTDC). This innovative facility will help researchers identify and validate novel drug targets and promote multidisciplinary collaborations. INTDC will ultimately help investigators transform their ongoing biological research.

This is also the goal of the University of Colorado at Denver School of Pharmacy. Its High-Throughput Screening (HTS) core facility leads to drug discoveries that have shown success in increasing the chances of realizing novel therapeutics. With technological advances in genomics, proteomics and

molecular biology, many research institutions now have the opportunity to impact drug discovery and development through specialized expertise and/or proprietary libraries.

Also assisting in early-stage drug development is the Colorado State University's Colorado Center for Drug Discovery (C2D2). As a statewide resource, C2D2 addresses a severe hurdle — supporting the discovery of pharmacologically validated drug candidates with patent-protected chemical matter by focusing their resources on chemical optimization with an eye toward drug candidate formulation.

C2D2 uses a selective solicitation process to identify Colorado research institution drug discovery projects that would be a good fit for their assistance. "The appeal of C2D2 is that all of our principals are experienced biopharma scientists," says C2D2 Co-director Terry Opgenorth, Ph.D. "So we have a lot of experience to help move things forward because we have seen many of the problems that can arise during drug discovery."

C2D2 Co-director Joe Guiles, Ph.D., adds, "What we do with programs we've selected is guide their research — acting more as a consultant. We listen to the scientists and what their goals are, and then we advise them on what we feel is realistically feasible and achievable. So far, the various academic bodies we have worked with have been very receptive to our suggestions."

NURTURING DEVELOPING COMPANIES

Technologies that have begun to show promise, but still need help crossing the so-called "valley of death" have a potential partner in the Colorado Institute for Drug, Device and Diagnostic Development (CID4). Through initial funding from the state of Colorado and the Fitzsimons Redevelopment Authority, CID4 is a source of funding and entrepreneurial expertise that can help transform new bioscience technologies into commercial success stories. CID4 does this by identifying and funding innovations with strong potential and by backing them with their extensive management expertise.

"The mission at CID4 is simple," says CID4 CEO Kevin Smith. "We aim to take big ideas that show promise and turn them into drugs or devices that create jobs and further the statewide growth of Colorado's bioscience infrastructure."

Through its application process, CID4 seeks to take on two or three projects per year, with equal consideration to drug and device development. CID4's funding structure varies depending on the project, but it always includes equity for the technology founders and a commitment to seeking additional outside funding for the companies that are formed.

Two companies were formed or selected through CID4's first technology solicitation in Spring 2010. One was PeptiVir, which is looking at creating a vaccine approach to treating influenza and other viruses. The second company was Sophono, which has licensed the rights to a hearing device that was approved in Europe and CE markets.

MOVING CLOSER TO MARKET

Companies that have developed to a point where their technology is viable and their

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Kevin Smith, President and Chief Executive Officer of CID4, with Richard Duke, CID4 Founder and Chief Scientific Officer, at headquarters in the Colorado Science + Technology Park at Fitzsimons. Photo by Kathleen Lavine and the Denver Business Journal.

basic business structure is in place also have allies to help them grow and attract more funding.

The Colorado State University Research Innovation Center (RIC) provides premiere incubator space for new companies and serves as a vehicle for performing collaborative translational-stage research with CSU's community of life-science investigators. The new 56,000-square-foot facility is a hybrid life-science accelerator and academic research building. Approximately 18,000 square feet of the three-story building is the life-science accelerator. The entire facility is designed to help start-up and established

companies conduct R&D and other business operations.

The center opened in September 2010 and is the home of C2D2 and four startup companies, two of which are university startups. The other two companies are external startup companies that were drawn to the center by its unique model that mixes academic researchers in the same space as business entrepreneurs.

Fitzsimons BioBusiness Partners (FBBp) is another key organization helping young Colorado bioscience companies get their footing. FBBp is a division within the Fitzsimons Redevelopment Authority, and it is responsible for nurturing sustainable bioscience businesses to establish a global position for the industry at the Colorado Science + Technology Park at Fitzsimons.

"FBBp was created to support the needs of Colorado bioscience companies so they could gain traction and begin to thrive," says FBBp Director Michael Artinger, Ph.D. "We help them define the best applications of their technology and work with them to put in place the resources they need to execute their strategy."

In addition, FBBp helps companies raise funding through angel or venture capital investors. It can also help connect new players with big pharma, diagnostic or medical device companies that might be interested in creating partnerships.

One of the companies that has benefited from the services offered by FBBp is SharkletTM Technologies, which developed the world's first technology to inhibit bacterial growth through pattern alone. Sharklet Technologies had a great year in 2010 when it received the Colorado BioScience Association Rising Star Award. The Company also earned the Dorsey & Whitney Venture Showcase Award at the 2010 BioWest conference.

LOOKING AHEAD

Through the combined work of so many great organizations, Colorado's bioscience industry has reason to feel optimistic about its future. Within the bioscience community there is a unique realization that the state is much stronger when government, universities and industry institutions collaborate on economic development issues.

By garnering continued support from state government and the entrepreneurial spirit that has built the industry, Colorado has an excellent opportunity to take its place as one of the nation's elite centers for bioscience discovery and development.

BIOSCIENCE COLORADO 2011/2012

WHEN THE GOING GETS TOUGH, THE TOUGH GET CREATIVE FINANCING

BY ADAM RUBENSTEIN

nduring economic turbulence combined with health-care legislation uncertainty has continued to pummel the entire lifesciences sector, from big pharma to the grant-supported academician. Whatever your favorite barometer of financing for our industry — be it PriceWaterhouseCoopers MoneyTree Report, the National Venture Capital Association or OnBioVC.com — the message was loud and clear: 2010 was the worst year of the past decade for venture financing in the life sciences industry. Early-stage discovery and development bioscience companies have seen access to risk capital, both from public granting agencies such as the NIH and private equity sources such as venture capital, significantly diminish.

In the face of this adverse fundraising backdrop, however, Colorado companies raised nearly \$100 million in venture capital, with financings distributed across a broad spectrum of sectors, including therapeutics, vaccines, diagnostics, medical foods and personalized medicine. Colorado's "git'er done" cowboy spirit, which permeates our life-science ecosystem, and savvy growth approaches developed by unique local sources, made 2010 another successful year of world-class biomedical research and development up and down the Front Range.



Lousiville, CO-based GlobeImmune, a late clinical-stage biopharmaceutical company focused on therapeutic vaccines for the treatment of infectious diseases and cancer, closed a \$17.5 million Series E financing. Just down the road in Broomfield, CO two companies closed follow-on financings: Accera locked in an \$11 million Series D. while Biodesix collected \$7.1 million in Series C financing. Accera is developing therapeutic treatments for central nervous system disorders such as Parkinson's disease and has already commercialized Axona®, a medical food designed to address metabolic deficiencies in Alzheimer's patients.

Biodesix is advancing personalized patient care by providing clinicians with important information relating to a patient's diagnosis, prognosis, or response to a specific therapy. The Company's first product, Veristrat®,

a clinically validated blood test that helps physicians guide treatment for patients with advanced non-small cell lung cancer, recently became commercially available.

Near the Flatirons, N30 Pharmaceuticals and SomaLogic, two Boulder, CO-based entities, also closed follow-on rounds. N30 booked a \$10 million Series B financing and is now a clinical-stage pharma company having dosed their first Phase I patient in September 2010 with N6022, a first-in-class inhibitor of s-nitrosoglutathione reductase for the potential treatment of inflammatory-based diseases such as asthma, chronic obstructive pulmonary disease (COPD) and inflammatory bowel disease (IBD).

If you are looking for the frontlines of the personalized medicine revolution, you need not look any further than SomaLogic, which closed a new \$15 million round. The Com-

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pany is developing unique proteomic reagents known as SOMAmers. This aptamer-based array technology unlocks biomarker discovery, enabling the detection of even the rarest of disease-associated proteins quickly, concurrently, effectively and economically.

These follow-on financings, backed by institutional capital from U.S. and international sources, speak to the progress toward regulatory approval and commercialization from a diverse set of Colorado companies.

Geographically concentrated venture financing events may be viewed as a gauge of the perceived quality of a region's innovation, intellectual property and human capital. A second metric that points toward the local quality of life-science products with a commercial trajectory is the Qualifying Therapeutic Discovery Project. The grant program, launched in 2009 by the Internal

Revenue Service and Department of Health and Human Services, approved applications for bioscience projects that show significant potential to produce new, cost-saving therapies, support job creation, and increase U.S. competitiveness. With a total of \$1 billion in credits and grants, the program awarded up to \$5 million per each eligible applicant. More than 60 Colorado-based life-science entities qualified for nearly \$25 million in Therapeutic Discovery Grant awards, with amounts ranging from \$60,000 to more than \$1,400,000. See the Therapeutic Discovery Grant map on page 11 for a list of recipients.

Colorado takes a holistic approach to developing its bioscience ecosystem, recognizing the importance of the very earliest portion of the innovation funnel that transpires in the laboratories of early-career investigators (ECIs). ECIs are faculty members who are

four years or less into their first academic appointment at a research institution. It is not uncommon for ECIs to have a difficult time acquiring support for their first opportunity at an independent research effort that aids their move out of the shadow of their mentors into their own areas of discovery.

Continuing the process, the Boettcher Foundation, Webb-Waring Foundation for Biomedical Research and the University of Colorado, formed the Webb-Waring Biomedical Research Program to support the work of early-career investigators in the biomedical field. Six grantees were named in the 2010 Inaugural Class of Boettcher Investigators, representing National Jewish Health, the University of Colorado, Colorado School of Mines and Colorado State University. Individual grant amounts ranged from \$200,000 to \$300,000, providing a total of more than

BIOSCIENCE COLORADO 2011/2012

\$1 million of support per year.

Colorado has a true public-private commitment to fostering the growth of the industry. In 2006, the Colorado General Assembly created the Bioscience Discovery Evaluation Grant Program (BDEGP) to grow the biosci-

ence industry with the intent of stimulating new bioscience job growth and company creation. The program provides five years of funding through FY 2012-13, at approximately \$5.5 million each year. The funds, raised from gaming revenues, are appropriated

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through the Governor's Office of Economic Development and International Trade and require a one-to-one matching source. As of April 2011, nearly \$19 million had been distributed. The legislature recently extended the program to 2018 injecting another \$25 million into the program. In addition, Senate Bill 47 was passed — creating approximately \$2 million per year in additional funding from state corporate income tax withholdings from growth of bioscience companies.

Methods of distribution include:

- Proof-of-Concept (POC) grants, of up to \$150,000, to research institutions,
- Early-Stage Company (ESC) grants, of up to \$250,000, to companies that have licensed intellectual property from a Colorado research institution, and
- Commercialization Infrastructure grants to enable the creation of a diverse set of resources often required to support translational-oriented academicians and early-stage companies.

The BDEGP has been recognized nationally as one of a handful of best-practices for state legislatures by the Biotechnology Industry Organization (BIO).

Out of 79 BDEGP POC grants awarded to date, 21 new companies have been created, with more promising Colorado companies in the pipeline. The ESC grants have aided 23 companies in achieving critical milestones in their evolution; those companies include 2C Tech, Advanced MicroLabs, Apop-Logic, BioAMPs, ClariMedix, EndoShape, Flashback Technologies, HepQuant, Hiberna, Illumasonix, InDevR, KromaTiD, MicroPhage, Oberon, PolyNew, QGents, Quest Product Development, SierraNeuro, Snoasis Medical and ValveXchange. Between POC, ESC and Infrastructure grants, the BDEGP has accounted for 598 new direct and indirect jobs within the state, with a total payroll of more than \$44 million. An additional \$68 million has been leveraged through follow-on investment, grants and matching funds, yielding approximately 8.3 times the programs distributed funding.

A thoughtful approach to address the needs of the rapidly accelerating early-stage community has been addressed by four BDEGP Infrastructure grants. Recipients include:

Colorado State University's Colorado Institute for Drug Discovery (C2D2), which provides a suite of resources, from medicinal chemistry to PK to ADME assays, compound library screening, informatics and more. These capabilities are designed to accelerate drug discovery research statewide.

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The University of Colorado, Boulder, which is now home to the Colorado Initiative in Molecular Biotechnology (CIMB), led by Nobel laureate and former President of the Howard Hughes Medical Institute, Tom Cech. CIMB focuses on enhancing core research areas at the forefront of molecular technologies applied to biosciences, creating a magnet for attracting and retaining outstanding students and faculty, bridging disciplines by integrating research and teaching and promoting interdisciplinary collaborations, and supporting biotechnology development along the Front Range.

The University of Colorado, Denver, through the Department of Pharmacology's High-Throughput Screening (HTS) core facility, where screening of compound libraries against potential therapeutic targets is performed and validated.

The Colorado Institute for Drug Device and Diagnostic Development (CID4), a 501(c)3 not-for-profit entity. C1D4's mission is to accelerate bioscience company and job growth in Colorado via select capital infusions and active management designed to help bridge the gap between life-science discovery and commercialization.

Despite a climate of relatively constrained financial resources across the country, Colorado continues to attract institutional capital along with the participation of local angels and successful serial biopreneurs. In addition to these private resources, a new and diverse array of public resources is working to leverage follow-on resources, as finite as they might be, to continue to catalyze the world-class research, development, clinical and commercial products derived from Colorado's talented work force.

2012 Life Science Research Conferences

Reystone Symposia's 55 conferences in its 2011-2012 meeting season cover the full range of the biomedical/life sciences from infectious disease, immunology, cancer and cardiovascular/metabolic disease to neuroscience, drug discovery and genetics/genomics. They include:

- High-Throughput Structural Biology January 22-27, 2012, Keystone Resort, Keystone, Colorado
- Chemical Biology and Novel Tools in Pharmacology February 12-16, 2012, Hilton Santa Fe, Santa Fe, New Mexico
- Addressing the Challenges of Drug Discovery Novel Chemical Targets, New Chemical Space and Emerging Approaches – March 19-23, 2012, Granlibakken Resort, Tahoe City, California

Don't miss these great opportunities to immerse yourself in the latest, groundbreaking research and forge new collaborations.

For a complete conference list visit www.keystonesymposia.org/meetings 1-800-253-0685 • 1-970-262-1230 PO Box 1630, Silverthorne, CO 80498 KEYSTONE SYMPOSIA on Molecular and Cellular Biology

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Aurora is home to the Anschutz Medical Campus and Fitzsimons Life Science District, one of the largest bioscience redevelopment projects in the United States. The 578-acre site is undergoing a \$5.2 billion transformation that will result in more than 18.5 million square-feet of space dedicated to excellence in health care, education and research.

Visit **www.auroraedc.com** for more information on Colorado incentives, our highly skilled workforce, and other resources that make Aurora the location for your next bioscience venture.





BIOSCIENCE COLORADO 2010/2011

WEBB-WARING BIOMEDICAL RESEARCH PROGRAM BOETTCHER INVESTIGATORS

Inaugural Class 2010



Shaodong Dai, Ph.D., Assistant Professor of Immunology, National Jewish Health, Chronic Beryllium Lung Disease

Robin Dowell, D.Sc., Assistant Professor of Molecular, Cellular and Developmental Biology, University of Colorado at Boulder, Translational Bioinformatics Involving Drug Efficacy and Genetics

Gidon Felsen, Ph.D., Assistant Professor of Physiology and Biophysics, University of Colorado – Anschutz Medical Campus, Parkinson's Disease

Paul Jedlicka, M.D., Ph.D., Assistant Professor of Pathology, University of Colorado – Anschutz Medical Campus, Ewing Sarcoma, a Common Cancer of the Bone and Soft Tissue Affecting Children

Keith Neeves, Ph.D., Assistant Professor of Chemical Engineering, Colorado School of Mines, Role of Blood Flow in the Formation of Blood Clots

Melissa Reynolds, Ph.D., Assistant Professor of Chemistry, Colorado State University, Nitric Oxide Releasing Materials for Cardiovascular Medical Devices

Investigators listed left to right



BOETTCHER® FOUNDATION

Congratulations Class of 2011

Zhe Chen, Ph.D., University of Colorado Boulder

Robert Doebele, M.D., Ph.D., University of Colorado Anschutz Medical Campus

Jing Wang, M.D., Ph.D., University of Colorado Anschutz Medical Campus

John D. (Nick) Fisk, Ph.D., Colorado State University

Tingting, Yao, Ph.D., Colorado State University



The Webb-Waring Institute was founded in 1924 by Dr. Gerald B. Webb and later directed by Dr. James J. Waring. For over 80 years, the organization contributed to the advancement of biomedical research by engaging in basic and clinical research and training research scientists. In 2008, the Webb-Waring Institute became a part of the University of Colorado and is now known as the Webb-Waring Center. The Boettcher Foundation was entrusted with the stewardship of the Webb-Waring Foundation's assets. Through an innovative agreement between the Boettcher Foundation, the Webb-Waring Foundation and the University of Colorado, a new funding area was established at the Boettcher Foundation that will support the work of early-career investigators in the biomedical sciences in Colorado.

For more information about the Boettcher Foundation, please visit www.boettcherfoundation.org.

Colorado

Office of Economic Development and International Trade

BIOSCIENCE DISCOVERY EVALUATION GRANT PROGRAM

AN EFFECTIVE ECONOMIC DEVELOPMENT, JOB AND COMPANY CREATION PROGRAM



he Bioscience Discovery Evaluation Grant Program (BDEGP) was created in 2006 by the Colorado General Assembly to grow the bioscience industry in the state. The goal was to stimulate jobs and create new bioscience companies based on promising discoveries made at the state's major research institutions.

The \$56 million program is appropriated through the Governor's Office of Economic Development and International Trade (OEDIT). Since the first grants were made in mid-to-late 2007, the program has provided 116 grants to researchers at Colorado research institutions; 41 grants to help early stage companies further these technologies; and has formed four new bioscience commercialization organizations to identify, manage and support technologies and to bring together necessary expertise to advance novel Colorado biotechnologies to commercialization. A total of \$19 million of the \$56 million program has been granted through April 2011. Each grant is awarded following a rigorous review by scientists, bioscience executives, financiers, and OEDIT.

Within this funding year (FY 2010-2011) 41 grants have been awarded as of April 2011, in three program areas:

- 30 Proof of Concept (POC) grants to research institutions to accelerate the development of new bioscience discoveries that may lead to the creation of new Colorado companies.
- 8 Early Stage Company Grants (ESC) to Colorado companies that have licensed a bioscience technology from a Colorado research institution.
- 3 Commercialization Infrastructure grants to develop essential resources for Colorado scientists and bioscience companies.

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2010 - 2011 PROOF-OF-CONCEPT GRANTS

COLORADO SCHOOL OF MINES

INVESTIGATOR: David Marr Ph.D.

TITLE: Cell Isolation Using DVD Optics

RESEARCH: The research has two goals in using DVD optics: 1) Optimization of microfluidic geometries and flows for cell isolation, and how to integrate these settings to sort cells; 2) Incorporation of detection of cell location using integrated quadrant photodiode.

IMPACT: Because of rising health-care costs, there is a significant need for inexpensive diagnostics and methods for drug screening in the context of personalized medicine – techniques that allow for rapid and point-of-care testing of potential therapeutics. Available DVD optical pickups are technologically sophisticated yet incredibly inexpensive due to their mass production and ubiquity in consumer electronics. The objective is to determine their practical utility for commercial biomedical device application.

NATIONAL JEWISH HEALTH

INVESTIGATOR: Richard Meehan, M.D.

TITLE: Joint Aspirate Facilitator Device

RESEARCH: Osteoarthritis (OA) is the most common cause of disability in the elderly and 1/3 of individuals > 65 years of age have OA of the knee which is the most common joint needing joint aspiration (for diagnosis) or injection.

IMPACT: This project should develop a novel, relatively inexpensive, reusable or disposable device which can improve patient comfort in a medically important but underutilized procedure, joint aspirations and injections.

INVESTIGATOR: Jerry Nick, M.D.

TITLE: A Novel Compound For Pseudomonas Biofilm Disruption

RESEARCH: This project will allow for synthesis of candidate molecules, using well-described drug-development modifications of a current product, with the goal of identifying unique molecules with superior stability and bioavailability. These candidates will then be tested in our model system of neutrophil-enhanced biofilm development on biofilm plates and contact lenses in vitro, followed by in vivo testing of treatment of PA infections in a murine model of thermal injury.

IMPACT: The proposed product will serve as an adjuvant to available antibiotics, to prevent or disrupt the PA biofilm in early stages of development, and improve efficacy of conventional treatment. If successful, this will be the first product of its kind in this potentially very large medical market.



INVESTIGATOR: David W.H. Riches, Ph.D.

TITLE: Therapeutic Small Molecule Inhibitors to Treat Pulmonary Fibrosis

RESEARCH: Idiopathic pulmonary fibrosis (IPF) is a fatal lung disease that severely limits the ability of patients to breathe. Two thirds of IPF patients die within 3 years of diagnosis accounting for approximately 45,000 American deaths every year. Unlike breast cancer, from which a similar number of American women die each year, there is no effective pharmacologic or biologic therapy for IPF.

IMPACT: The goal of this project is to discover small molecule inhibitors (therapeutics) that block the interaction between Fas and PTPN13. The identification of such molecules could pave the way for an innovative therapeutic approach to the treatment of IPF. In addition, the same small molecule inhibitors could represent a new treatment for pancreatic and colon cancer where resistance to Fas-induced apoptosis also contributes to disease progression. Given the dismal responses of patients with IPF, colon and pancreatic cancers to current therapies, the approach might offer a new avenue for treatment in the long term.

INVESTIGATOR: Gongyi Zhang, Ph.D., and John Cambier, Ph.D.,

TITLE: BCMA-Fc Chimeras as Therapeutics for Autoimmunity

RESEARCH: B cells play a critical role in a broad spectrum of human autoimmune diseases. These include not only those diseases that are mediated by autoantigen-reactive antibodies such as Systemic Lupus Erythematosis, Idiopathic Thrombocytopenia and Multiple Sclerosis, but also autoimmune diseases that have a prominent T cell effector component such as Type 1 Diabetes and Rheumatoid Arthritis.

IMPACT: The current best therapy for these diseases is Rituxan, an antibody that targets B cells for destruction by phagocytic cells found in the liver. While Rituxan holds great promise, it spares certain B lineage cells, and therefore is not effective in all situations. For example, clinical trials using Rituxan for SLE failed, probably because the offending B cell population was not efficiently eliminated. Finally, the mode of action of Rituxan places patients at risk of a variety of infectious diseases. Specifically, Rituxan causes long-term depletion (sometimes 1-2 years) of B cells needed to fight infection. Clearly there is great need for effective alternative B-cell targeted therapies.

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INVESTIGATOR: Philippa Marrack, Ph.D. and Anatoly Rubtsov, Ph.D.

TITLE: Generation of Bispecific Antibodies for Targeting Autoimmune-Associated B Cells (ABCs)

RESEARCH: Current autoimmune disease treatments have been mainly directed to preserve the body organs. These treatments can preserve organ function and reduce pain, but they fail to stop or cure the disease. Modern therapies for autoimmune diseases have very profound effects on the whole immune system and tend to affect large populations of cells that are important for maintaining protection of the host from pathogens. Investigators propose to generate a new type of antibody that will specifically deplete a small population of autoimmune-associated B cells (ABCs) recently identified by the likely source of autoantibodies in autoimmune mice.

IMPACT: The plan is to design antibodies that will target a specific population of cells that has been demonstrated to play a key role in the production of autoantibodies. If the designed antibodies indeed cause the depletion of ABCs, the product could become a powerful new drug in the treatment of a variety of autoimmune diseases.

INVESTIGATOR: Remy Kachadourian, Ph.D. and Brian J. Day, Ph.D.

TITLE: Combining Pro-Oxidant Effects to Kill Cancer Cells; A Mouse Model Study

RESEARCH: The strategic objective of this project is to demonstrate in an animal model the efficacy of a new approach to sensitize cancer cells to alkylating agents. This new approach is based on inducing glutathione (GSH) efflux through multi-drug resistant proteins (MRPs) that are activated by some flavonoids. Investigators plan to demonstrate in an animal model (mice), the benefits of combining a GSH depleting agent with an alkylating agent.

IMPACT: The development of new and more efficient inducers of GSH depletion may significantly impact cancer treatment by allowing the use of smaller treatment doses, resulting in better patient tolerance and compliance. Therefore, this project can potentially lead to the commercialization of a library of compounds that would be used in individualized medicine against cancer.



COLORADO STATE UNIVERSITY

INVESTIGATOR: Charles S. Henry, Ph.D. and Lawrence Goodridge, Ph.D.

TITLE: Microfluidic Paper-Based Analytical Device for Detection of Pathogenic Bacteria

RESEARCH: The goal of this project is to develop a sensor for the detection of foodborne pathogens using selective biological assays to be used in the food industry.

IMPACT: Diseases resulting from foodborne pathogens affect millions of people every year and represent a major health problem in developed and developing countries. Most foodborne illness can be prevented with proper sterilization. Current monitoring methods are too slow, expensive, prone to interference, or too cumbersome for widespread implementation. The project outcome will result in a new technology that overcomes these problems and addresses an area of significant need in the food industry.

INVESTIGATOR: Susan P. James, Ph.D. and Lakshmi Prasad Dasi, Ph.D.

TITLE: Developing the Cardiovascular Applications of BioPolyTM

RESEARCH: The goal of this project is to develop BioPoly[™] materials for use in cardiovascular blood-contacting applications. BioPoly materials which are largely made of synthetic plastic have the mechanical properties of plastic − they are strong, flexible and durable. A small percentage of natural hyaluronan (HA) is also incorporated into the materials and gives them water-loving, tissue-like surface properties. These materials are easy to manufacture into a variety of shapes.

IMPACT: Cardiovascular BioPoly will meet critical needs in two large human health markets: 1) small-caliber vascular grafts that can be used in the over 1.4 million arterial bypass surgeries performed each year in the U.S.; and 2) leaflets for polymeric heart valves in the roughly 400,000 heart valve replacement surgeries performed each year.

INVESTIGATOR: Susan P. James, Ph.D. and David A. Prawel, M.S., Ph.D. Candidate

TITLE: Penetrating Osteointegrative Coatings for Titanium Lattice Implants

RESEARCH: Use electrospraying to deposit consistent, biocompatible coatings on titanium surfaces which will enhance integration of orthopedic implants into existing bone.

IMPACT: The proposed research would significantly enhance the clinical outcome of patients in the joint replacement and bone cancer reconstructive implant markets by improving natural bone growth, more deeply into the structure of these implants.



INVESTIGATOR: E. Christopher Orton, Ph.D.

TITLE: Catheter-Delivered Artificial Heart Valve Device

RESEARCH: The goal of this project is to provide proof of concept of a novel catheter-delivered mitral valve replacement device. The device is designed to be delivered into the beating heart, thereby eliminating the need for open heart surgery or a heart lung machine (i.e. cardiopulmonary bypass). Thus, the device can be delivered less invasively and in a much shorter period of time compared to traditional open heart surgery, and thereby would be safer in older and seriously ill patients.

IMPACT: Approximately 65,000 heart valve repairs or replacements are performed in the United States each year. Currently, valve repair or replacement usually requires traditional open heart surgery (i.e. cardiopulmonary bypass with a heart lung machine). Much of the morbidity associated with heart valve surgery is caused by effects of cardiopulmonary bypass and the heart lung machine. The catheter-delivered mitral valve replacement device would eliminate this problem. Open heart surgery is poorly tolerated in older patients and those with concurrent serious illnesses. This device would potentially allow for many of these excluded patients to receive life-extending heart valve surgery.

INVESTIGATOR: Tomislav Rovis, Ph.D.

TITLE: Efficient Synthesis of New Resorcinylic Macrolide HSP 90 Anticancer Agents

RESEARCH: The aim of this research is to develop a general approach to synthesizing a variety of resorcinylic macrolides using a highly efficient polyketide cassette technology. These compounds are expected to be inhibitors of heat shock protein HSP90, a promising antitumor target. A variety of resorcinylic macrolides will be synthesized and screened for their antiproliferative activity in tumor cells. The most promising candidates will be selected for the next stage of pre-clinical research.

IMPACT: This work will specifically target the human anticancer drug market, although it may have veterinary applications as well. Deliverables include the synthesis and selection of promising antitumor compounds based on resorcinylic macrolides, the most successful of which will be ready for the next stage of pre-clinical research.

INVESTIGATOR: Kenneth F. Reardon, Ph.D.

TITLE: Multichannel Optical Biosensor for Oxygen-Based Detection of Organic Chemicals in Aqueous Media

RESEARCH: This project advances the technological state of an optical enzymatic biosensor platform by using biological and engineering approaches to increase the biosensor lifetime, improving the multichannel optoelectronic hardware system used for measuring analytes in mixtures, and developing multichannel calibration and measurement protocols. The multichannel optical biosensor will be used to detect contaminants in water and food.

IMPACT: The ability to easily and accurately monitor water and food supplies for contaminants has tremendous health and economic benefits.

INVESTIGATOR: Sybil E. Sharvelle, Ph.D.

TITLE: Development of a Multi-Stage Anaerobic Digester for Generation of Methane from Manure

RESEARCH: The goal of this project is to demonstrate the feasibility of a novel multi-stage anaerobic digester system for converting solid animal waste into biogas, specifically methane. The modular, multi-stage design proposed should have advantages in overcoming scaling issues and will be specifically suited for the arid conditions found in the western United States. Synergistic benefits include reduction of solid animal waste and generation of biogas onsite.

IMPACT: Implementation of the reactor onsite will reduce solid animal waste and generate biogas that will partially offset an operation's energy expenses. This technology will be of benefit to many livestock operations, including large Concentrated Animal Feeding Operations (CAFOs) that typically include thousands of animals.

COLORADO INSTITUTE OF MOLECULAR BIOTECHNOLOGY

INVESTIGATOR: Natalie Ahn, Ph.D. & Tin Tin Su, Ph.D.

TITLE: Radiation Sensitizers for Cancer

RESEARCH: The aim of this grant work is to optimize a small molecule lead compound which synergizes with radiation, in order to develop novel compounds with a high combination index for use in the radiation treatment of cancer.

IMPACT: Existing cancer therapies have key limitations, in that targeted therapies are often so specific that they only benefit a small subset of patients with a particular mutation, while chemotherapy and radiation have devastating side effects due to toxicity. Combination therapy using drugs which target different aspects of disease progression is not only more therapeutic, but allows lower doses of each to be used, thereby reducing side effects. Small molecule drugs which increase the efficacy of radiation therapy may allow reduction of radiation doses or overall radiation exposure. Based on results thus far, the small molecule lead compound studied will be effective in combination with irradiation for treating cancer.

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INVESTIGATOR: Natalie Ahn, Ph.D. & Xuedong Liu, Ph.D.

TITLE: A Highly Potent Histone Deacetylase Inhibitor For Cancer Therapeutics

RESEARCH: The aim of this grant work is to optimize a small molecule inhibitor of histone deacetylases which shows high potency and selectivity against human xenograft tumors and a panel of cancer cell lines.

IMPACT: Ideal drugs for cancer therapy are those which selectively kill tumor cells, but spare normal cells. However, anti-cancer drugs which fulfill these criteria are extremely rare. Histone deacetylace (HDAC) inhibitors have emerged as one of the most promising targets for cancer therapies, given widespread evidence that inhibition of histone deacetylation promotes growth arrest, differentiation, and apoptosis of tumor cells, with minimal effects on normal tissues. The new proprietary compound identified in structure activity relationships (SAR) studies, paragazole, appears to be superior to other known HDAC inhibitors in potency while maintaining selectivity.

INVESTIGATOR: Natalie Ahn, Ph.D. & Tarek Sammakia, Ph.D.

TITLE: Treatments for Chronic Pain

RESEARCH: The aim of this grant work is to develop new chemical entities structurally related to tricyclic antidepressants, which remove antidepressant activity while acting as potent inhibitors of the opioid-mediated TLR4 response. These will provide novel compounds which when used in combination with opiods, eliminate side effects in treating chronic pain.

IMPACT: Chronic pain occurs in epidemic proportions worldwide. The most effective therapeutics for the treatment of moderate to severe pain are opioids, all of which are prone to abuse, tolerance, and dependence. Developing chiral tricyclic antidepressants (TCAs) will provide a route to block side effects of opioids towards TLR4, while taking advantage of the blood-brain permeability of TCAs. Resulting therapeutics will lessen the effects of tolerance and dependence associated with opioids.



INVESTIGATOR: Christopher Bowman, Ph.D.

TITLE: Dual Core Polymer Systems for Biomedical Applications

RESEARCH: The Project objective is to develop a dual cure polymer system for orthopedic suture anchors and contact lenses for commercialization.

IMPACT: The successful development of a dual cure shape memory polymer as an orthopedic suture anchor would result in a product that is superior in several areas to current market products. The two stage cure allows minimally invasive deployment of the anchor coupled with a high-modulus, high-strength final fixed device.

Parallel development of novel materials and processes for producing custom contact lenses, based on customer's personal wavefront measurements, will result in corrective lenses that perform significantly better than today's lenses. These materials and methods will be applicable to the traditional contact lens wearers, and will also open new markets for patients requiring higher order vision correction not currently possible with existing contact lens technology.

INVESTIGATOR: Leslie Leinwand, Ph.D.

TITLE: Novel Therapeutics for Pathological Cardiac Hypertrophy

RESEARCH: The strategic objective of this grant is to develop specific fatty acid (FA) species as therapeutic tools to promote beneficial cardiac adaptation in the presence of pathological stimuli. Using the fed python as a model of extreme physiological adaption, the project aims to determine the ability of FAs to regulate mammalian heart cell size, function and gene expression in both in vitro cell culture and in vivo rodent models.

IMPACT: There is a need for a better understanding of the intracellular pathways that differentially regulate physiological and pathological hypertrophy. The elucidation of the molecular pathways that control enlargement of the heart remains a central question in cardiovascular research and the identification of key physiological vs. pathological effectors may provide novel therapeutic targets to prevent, reverse, or modify the pathological hypertrophic phenotype. Novel therapeutic targets can lead to new therapies for heart disease.

INVESTIGATOR: Hubert Yin, Ph.D.

TITLE: Developing Novel Drug Candidates Optimizing Opiate's Clinical Efficacy

RESEARCH: The Project objective is to develop agents that can optimize a promising, small molecule TLR4 inhibitor--T5342126--to selectively block opioid-induced TLR4 activation and improve opioid pain relief while minimizing opioid dependence.

IMPACT: Because current pharmacotherapeutics have failed both to control pain and to avoid the negative consequences, there is an urgent need to develop the next generation pain management therapies.



UNIVERSITY OF COLORADO

INVESTIGATOR: Heide Ford, Ph.D.

TITLE: Identify Inhibitors Of The Six1-Eya Interaction for Anti-Breast Cancer Drug Design.

RESEARCH: The Project objective is to identify and develop inhibitors targeting the interaction of the Six1 gene and its co-factor Eya for anti-breast cancer drug design.

IMPACT: This research is expected to benefit up to 50% of breast cancer patients with primary breast tumors and up to 90% of patients with metastatic tumors. In addition, data from our group and other groups demonstrates that Six1 is over expressed in numerous additional tumor types, including, amongst others, lung, ovarian, hepatocellular, and brain cancers. While initial efforts will be to develop drugs for breast cancer; small molecules that inhibit the Six1 transcriptional complex may also be applied to many other types of cancer.

INVESTIGATOR: Emily Gibson, Ph.D.

TITLE: In vivo imaging of the eye using multi-photon optics for diagnosis and monitoring of disease.

RESEARCH: The Project objective is to construct a prototype device allowing multi-photon microscopy imaging of the trabecular meshwork region of the human eye in vivo. This would allow for early diagnosis and intervention to prevent vision loss from glaucoma.

IMPACT: There exists a great and unmet need for technology to accurately diagnose glaucoma and map its progression before optic nerve damage occurs. Such an invention would increase the effectiveness of medical intervention and prevent vision loss for millions.

INVESTIGATOR: Todd Grazia, Ph.D.

TITLE: Autologous CD117+ Progenitor Cell Therapy in Solid Organ Transplantation and Type 1 Diabetes

RESEARCH: The project objective is to study and develop CD117 bone-marrow derived progenitor cells as a novel therapeutic in solid organ transplantation and Type I Diabetes.

IMPACT: These cells have high impact potential for the field of tissue and organ transplantation as well as auto-immunity (Type I Diabetes) - as either primary therapy or adjunct therapy to improve tissue/cellular engraftment, decrease acute rejection, and to promote organ transplant tolerance (lack of rejection despite no concomitant immune-suppression).

INVESTIGATOR: Robert Hodges, Ph.D. & Kathryn Holmes, Ph.D.

TITLE: A Novel Conformation - Stabilized, Synthetic Peptide Vaccine for Respiratory Syncytial Virus

RESEARCH: The Project objective is to develop a novel synthetic peptide vaccine to prevent Respiratory Syncytial Virus infection, a common respiratory virus impacting infants, the elderly and others with weak immune systems. This application will provide further proof of concept that the underlying invention can serve as a platform technology effective against viruses with similar mechanisms of viral entry.

IMPACT: The Project will develop a novel synthetic peptide vaccine to prevent infection with Respiratory Syncytial Virus (RSV), a common respiratory virus that infects children worldwide by age 2 and causes severe disease or death in infants under 6 months of age who have underlying lung or heart disease as well as elderly patients or adults with weak immune systems.

INVESTIGATOR: Malik Kahook, Ph.D.

TITLE: Shape Memory Polymer Glaucoma Drainage Device

RESEARCH: The project will advance preclinical testing of a novel microsurgical implant (MSI) leveraging Shape Memory Polymer (SMP) technology. The Project will develop a novel device to maintain fluid communication between the anterior chamber of the eye and the outside of the eye to manage and reduce high eye pressure in glaucoma patients.

IMPACT: An alternative surgical procedure for glaucoma that is minimally invasive, easily reproducible, and free of serious side effects would be of great benefit to patients.

INVESTIGATOR: Tad Koch, Ph.D.

TITLE: In Vivo: Preclinical Evaluation of a New Therapeutic for Pancreatic Cancer

RESEARCH: Grant work involves preclinical experiments to establish the distribution, metabolism, toxicity, and efficacy of a prodrug, Plasmin Activated Doxazolidine (PAD), for the treatment of pancreatic cancer. PAD may be effective against a wide variety of solid tumors.

IMPACT: Investigators envision PAD replacing the cytotoxic components of current therapies for pancreatic cancer and being used in combination with a cell signaling inhibitor such as erlotinib or sorafenib. Success in treating advanced pancreatic cancer will stimulate investigation for the treatment of advanced solid tumors of the breast, prostate, lung, and colon.

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INVESTIGATOR: Brian Stauffer, Ph.D.

TITLE: Selective β_{1} - Adrenergic Blockade in Children with Heart Failure

RESEARCH: This project aims to provide in vivo evidence for a class of therapeutic agents that are beneficial for the treatment of heart failure in children. The purpose of the project is to determine the ability of 3 β_1 selective adrenergic receptor antagonists and a β_2 receptor agonist to prevent cardiac pathology in the animal model of pediatric disease.

IMPACT: The unmet clinical need underlying the proposal is the lack of evidence based medical therapy for children with heart failure. The current project will address this need by providing in vivo evidence of a class of therapeutic agents that are beneficial for the treatment of heart failure in children.

INVESTIGATOR: Dan Theodorescu, Ph.D.

TITLE: Novel Inhibitors of Ral for the Treatment of Bladder Cancer

RESEARCH: The aim of this project is to design, synthesize, and evaluate novel second generation small-molecule inhibitors of Ral (proteins) based on lead compounds found in initial screening assays for the treatment of bladder cancer.

IMPACT: Developing a portfolio of Ral inhibitors would expedite the transition of these compounds from preclinical to clinical development where they will be of therapeutic benefit to lung, bladder, and prostate cancer patients.



PhRMA

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UNIVERSITY OF DENVER

INVESTIGATOR: Siavash Pourkamali, Ph.D.

TITLE: Development of a Nanomechanical Biosensing Platform

RESEARCH: The objective of this project is to develop, optimize and demonstrate the basis for a new biosensing platform with fully electronic readout that allows faster and simpler bioanalysis at a much lower cost. The platform will be based on the liquid phase compatible nano-electro-mechanical resonator technology that allows direct real-time measurement of the mass of the absorbed molecules eliminating the need for fluorescent labeling and optical readout setups.

IMPACT: This technology can potentially lead to much more cost effective and less labor intensive biodetection and medical diagnosis solutions as well as advanced and affordable instruments for molecular biology and biochemical research.

UNIVERSITY OF NORTHERN COLORADO

INVESTIGATOR: Steve Mackessy, Ph.D.

TITLE: Toxins To Drugs: An Investigation of Colubrid Snake Venoms for Anticancer Compounds

RESEARCH: Identifying and evaluating novel snake venoms with high promise for potentially useful drug compounds on three different and common human cancers.

IMPACT: The research has accumulated a high number of venoms from snakes; developed an efficient workflow for processing venoms; purifying components and evaluating effects as well as moving into the next phase of drug discovery and development.

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EARLY STAGE COMPANY AWARDS 2010-2011

2C TECH CORPORATION, LONGMONT

Development of animal models and complete formulation for phase I clinical trials of nanotechnology for the preservation of vision in patients with retinal degenerative diseases.

BIOAMPS INTERNATIONAL, LLC, AURORA

Development of a peptide drug solution to the problem of bacterial resistance to conventional antibiotics.

CLARIMEDIX INC., BOULDER

Development of a proprietary medical device technology with the ability to non-invasively trigger and modulate the production of nitric oxide to treat Alzheimer's disease.

CYTOLOGIC, INC., BOULDER

Commercialization of UNLEASH, CytoLogic's novel immunotherapy aphaeresis column, for cancer treatment.

MOSAIC BIOSCIENCES, BOULDER

Commercialization of versatile tissue regeneration technology to create a synthetic extracellular matrix that can be used to expedite the natural healing and tissue regeneration process.

PEPTIVIR, INC., AURORA

Commercialization of a conformationally-constrained, synthetic peptide-based vaccine platform for the prevention of viral diseases.

PRECISION BIOPSY, AURORA

Prototyping of a proprietary fluorometer that can be utilized in clinical settings for real-time diagnosis of prostate cancer.

SUVICA, INC., BOULDER

Development of compounds identified in a novel screen and licensed from CU-Boulder. These compounds enhance the efficacy of standard cancer therapies and have the potential for use in the treatment of multiple cancer types.





COMMERCIALIZATION INFRASTRUCTURE AWARDS 2010-2011

COLORADO INSTITUTE FOR DRUG , DEVICE AND DIAGNOSTIC DEVELOPMENT (CID4)

The Colorado Institute for Drug, Device and Diagnostic Development funds and provides management expertise to life science discoveries from Colorado research institutions and start-up companies through feasibility, pre IND studies, and initial clinical trials with the goal of creating viable new Colorado bioscience companies supporting quality jobs.

CSU - COLORADO CENTER FOR DRUG DISCOVERY

The Colorado Center for Drug Discovery (C2D2) fills a gap in drugdiscovery at Colorado research universities. The C2D2 provides medicinal chemistry, pharmacokinetics, and consulting resources to create new patent-protected compounds useful for validation of novel drug discovery targets and drug candidates for clinical development by Colorado biopharma companies and others.

CU - COLORADO INITIATIVE IN MOLECULAR BIOTECHNOLOGY (CIMB)

The CIMB is engaged in the construction of a state-of-the art 311,000 square foot research and education facility that links the basic sciences, engineering, clinical practice, and industry at the University of Colorado's Boulder campus to support breakthrough developments in areas such as engineering human tissues, RNA enzyme and aptamer based pharmaceuticals, biorefining, and genetics. State grant funds will be applied to the costs of the Integrated Novel Therapeutic Discovery Center, a Sequencing Center, and costs to construct a specialized research support center.





The Next Frontier in Life Sciences

The drive and determination of over 600 Colorado bioscience companies help improve lives locally and around the world.

Why Colorado?

The ability to recruit and retain technical and scientific employees:

Colorado has 10 nationally recognized higher education institutions and 24 federal labs.

Colorado ranked 1st nationally for labor supply. *-Forbes, 2010*

Colorado is the second-most highly educated state. -U.S. Census Bureau, American Community Survey, 2010

Top metro area cities to live and work:

Denver is ranked #1 where people most want to live. -Pew Research Center. 2009

Boulder is ranked 4th nationally for "Best Cities for the Next Decade" for innovation and collaboration.

-Kiplinger's, 2010

Affordable operating costs:

Bioscience companies can recruit affordable, productive employees as the state's average wage for bioscience workers is below the national average.

-Metro Denver EDC Bioscience Colorado Industry Cluster Profile 2011

Colorado's average cost of living is 30% below east and west coast cities.

-ACCRA

A pro-business environment and competitive tax structure:

Colorado ranked 10th among the nation's best tax climates for small businesses and entrepreneurs.

-Metro Denver EDC Bioscience Colorado Industry Cluster Profile 2011

Colorado is 3rd among "America's Top States for Business" ranking highly for economy, business friendliness, and access to capital.

-CNBC. 2010

Access to financial resources to fund research and development:

The state passed \$56 million bioscience grant program providing funding for emerging and early stage companies and commercialization infrastructure.

Colorado ranks second in Small Business Innovative Research (SBIR) grants, third in venture capital investments per \$1,000 for State GDP.

-Toward a More Competitive Colorado, Sixth Edition, 2010



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COLORADO'S CLINICAL TRIAL LANDSCAPE

BY ADAM RUBENSTEIN



olorado is home to a host of companies whose products are undergoing clinical trials, demonstrating a maturing bioscience community that maintains industry strengths beyond simply the discovery, research and development stages. The state claims a talented and dedicated work force of regulatory, quality and commercially-focused professionals who are successfully shepherding quality-of-life improving and lifesaving technologies through human trials and placing FDA-approved products in the treatment quiver of clinicians in the U.S. and around the world.

It is not simply the resident bioscience companies that are conducting clinical trials at a mile above sea level: There are more than 1,000 clinical trials recruiting, enrolling and treating patients throughout Colorado hospitals, universities, doctors' offices and community clinics. Many of these trials are sponsored by federal agencies such as the National Institutes of Health, the Department of Defense, and the Department of Veterans Affairs. Additionally, more than 100 public and private pharma, biopharma and device companies

are leveraging the facilities, professionals and citizens of Colorado to spearhead the world's most innovative health-care products.

Following is a snap-shot of some Colorado-based companies who are working to advance the practice of modern medicine through their pursuits of human clinical trials:

Westminster, CO-based **Allos Therapeutics** (NAS-DAQ: ALTH) has established itself as a commercial organization in the oncology space as it drives sales of pralatrexate in the U.S. and retains the drug's exclusive worldwide commercial rights for all indications. Based on the results of its PROPEL clinical trial, the Company intends to seek regulatory approval to market pralatrexate in Europe for the treatment of relapsed or refractory peripheral T-cell lymphoma. Allos is committed to evaluating pralatrexate both as a single agent and in combination with other therapies via ongoing clinical trials. Additional trials are planned to evaluate pralatrexate's potential clinical utility in other hematologic malignancies and solid tumor indications.

Companies conducting Colorado-based clinical trials include:

Abbott Abraxis BioScience Allergan Amylin Pharma Astellas Pharma AstraZeneca Biogen Idec BiPar Sciences Boehringer Ingelheim Bristol-Myers Squibb Celgene Clavis Pharma Cubist Pharma Eli Lilly Forest Laboratories Genentech GlaxoSmithKline Johnson & Johnson MedImmune Medtronic Merck **Novartis** Novo Nordisk Ortho-McNeil Otsuka Pfizer Sanofi-Aventis Schering-Plough St. Jude Medical Takeda Wyeth Zimmer

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Clinical Pipeline: Pralatrexate pipeline is currently being examined in hematological malignancies in peripheral T-cell lymphoma (Phase III), in cutaneous T-cell lymphoma (Phase I), lymphoma (Phase II) and B-cell non-Hodgkin's lymphoma (Phase II). The compound is also being examined in solid tumors in non-small cell lung cancer (Phase III), bladder cancer (Phase II) and breast cancer (Phase II).

Boulder, CO-based Array Biopharma (NASDAQ: ARRY) is a biopharmaceutical company focused on the discovery, development and commercialization of targeted small molecule drugs to treat cancer and inflammatory diseases. The Company's drug development pipeline includes candidates designed to regulate therapeutically important target proteins and those aimed at significant unmet medical needs. In addition, a number of leading pharmaceutical and biotechnology companies are collaborating with Array to discover and develop drug candidates across a broad range of therapeutic areas.

Clinical Pipeline: Phase I trials in both HER2-positive metastatic breast cancer and

HER-family cancer patients showed that ARRY-543 was generally well tolerated and demonstrated evidence of tumor regression and prolonged stable disease in EGFR- and HER2-expressing cancers. A Phase Ib study of ARRY-543, in combination with Xeloda, Taxotere and Gemzar, is currently enrolling patients with solid tumors. Array continues a dose escalation in a Phase I trial with ARRY-380 to evaluate a maximum, safely tolerated dose and pharmacokinetics in patients with advanced cancer. Clinical development activities for ARRY-520 consist of a Phase I trial of ARRY-520 in patients with solid tumors, a Phase I trial in patients with AML, and a Phase I/II trial in patients with multiple myeloma. ARRY-614 has completed a singleand multiple-dose escalation study in healthy volunteers and initiated a Phase Ib/II trial in myelodysplastic syndrome. ARRY-797 has completed two Phase II trials in acute inflammatory pain using a dental pain model.

Westminster, CO-based **Cerapedics** is a medical device company enhancing the science of bone repair by developing and commercializing osteobiologic products based on P-15TM, a proprietary small peptide anorganic bone mineral.

Clinical Pipeline: Cerapedics is currently enrolling patients in a Phase III clinical trial of P-15 Bone Putty for single level anterior cervical discectomy and fusion procedures. The trial will assess the safety and effectiveness of P-15 Bone Putty as a substitute for local autologous bone when applied in instrumented anterior cervical discectomy and fusion with use of a structural allograft ring in patients with degenerative cervical disc disease.

Lousiville, CO-based **GlobeImmune** is a biopharmaceutical company focused on the development of therapeutic vaccines called Tarmogens® for the treatment of cancer and infectious diseases. Tarmogens generate activated killer T-cells designed to locate and eliminate cancer cells and/or virally infected cells. In May 2009, the company announced a global partnership with Celgene focused on the discovery, development and commercialization of multiple product candidates for the treatment of cancer.

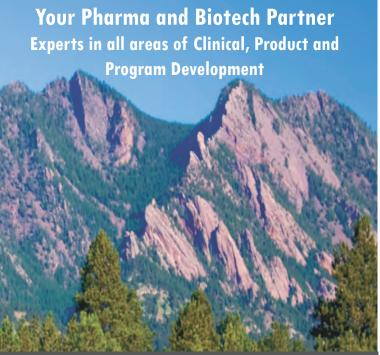


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2011/2012 BIOSCIENCE COLORADO

Clinical Pipeline: GI-5005, in a Phase IIb trial for chronic hepatitis C, expresses a fusion protein encompassing sequences from both HCV NS3 and Core proteins. NS3 and Core, abundantly expressed in infected cells, are required for viral replication and contain targets that are recognized by both CD4+ helper and CD8+ killer T-cells. Both the Core and NS3 proteins are highly conserved among HCV genotypes 1a and 1b, the HCV strains most prevalent in the U.S. GI-5005 is designed to complement both the current standard of care and emerging novel therapies for HCV. GI-4000, for mutated-Ras mediated cancers, causes the targeted elimination of any cell containing mutations in the ras oncogene, and is being investigated in Phase II clinical trials for the treatment of pancreas, non-small cell lung and colorectal cancers.

Greenwood Village, CO-based **Omni Bio Pharmaceutical**'s (OTCBB: OMBP) strategy is to advance existing and novel therapies it believes have the potential to quickly move through clinical trials and advance to commercialization. This strategy is based on licensing issued patents and pending patent applications

that cover new uses for an existing FDAapproved drug, Alpha-1 antitrypsin (AAT), which is currently used in the treatment of emphysema in AAT-deficient patients.

Clinical Pipeline: Initial patients have been infused in the company's FDA-cleared Phase I/II human clinical trial of AAT in recently diagnosed Type 1 diabetics at the Barbara Davis Center for Childhood Diabetes at the University of Colorado, Denver Anschutz Medical Campus. The Phase I/II clinical trial is evaluating the potential of AAT to halt or reduce the deterioration of islet beta cells that causes Type 1 diabetes. While Type 1 diabetics will experience islet beta cell destruction, the trial evaluates whether AAT treatment may help stop the course of the disease in newly diagnosed diabetics who may have remaining islet beta cells.

Boulder, CO-based N30 Pharmaceuticals is focused on restoring nitric oxide (NO) balance by decreasing disease-associated accelerated breakdown of NO's primary depot, S-nitrosoglutathione (GSNO). To date, pharmacologic inhibition in mince of S-nitrosoglutathione reductase (GSNOR) or

GSNOR knock-out have shown benefit in models of respiratory (asthma and Chronic Obstructive Pulmonary Disease COPD), cardiovascular (hypertension and endothelial dysfunction) and Inflammatory Bowel Disease (IBD). N30's drugs target nitric oxide reductase (NOR), the most important of which is GSNOR, an enzyme of central importance in human health and disease. GSNOR is a selective enzyme that breaks down GSNO, the most abundant low molecular weight source of the human body's nitric oxide and is long known to be a potent inhibitor of inflammation. GSNO also positively affects vascular and airway smooth muscle tone as well as control of breathing. Inhibition of GSNOR increases the levels of endogenous GSNO.

Clinical Pipeline: N30 announced in the fourth quarter of 2010 that it has dosed the first human subject with N6022, a first-in-class inhibitor of GSNOR. N6022 is the lead product in N30's portfolio of drugs designed to treat asthma, COPD and IBD. The initial Phase I testing in healthy subjects is designed to evaluate the safety, tolerability and pharmacokinetics of single, increasing intravenous dosages.

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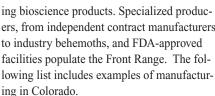
BIOSCIENCE COLORADO 2011/2012

MILE HIGH MANUFACTURING

BY ADAM RUBENSTEIN

DISCOVERY VALLEY OF DEATH PRECLINICAL FDA REVIEW







BIOPHARMA MANUFACTURING

Amgen (Longmont and Boulder, CO) a leading human therapeutics company pioneered the development of novel products based on advances in recombinant DNA and molecular biology. The Company launched the biotechnology industry's first blockbuster therapeutics, Aranesp® and Epogen®. Amgen LakeCentre facilities manufacture treatments for several conditions, including chemotherapy side effects, anemia in patients with chronic kidney disease and osteoarthritis. LakeCentre produces Kineret® (anakinra) along with palifermin and other pipeline product candidates in late-stage clinical development, while Longmont is dedicated

as complex and costly an endeavor as the discovery, R&D, and clinical trial processes. Colorado is home to manufacturers of small molecules, biopharmaceuticals, diagnostics and devices, and a few of the world's best-sell-

2010/2011 BIOSCIENCE COLORADO



to the manufacture of Epogen (Epoetin alfa) and Aranesp (darbepoetin alfa).

Merck acquired Insmed's (Boulder, CO) follow-on biologic candidates and their commercial manufacturing facilities. These follow-on biologic candidates include INS-19 and -20, recombinant forms of granulocyte-colony stimulating factor (G-CSF), both are currently being evaluated in Phase I trials for their ability to prevent infections in patients with cancer receiving chemotherapy, and are designed to allow for less frequent dosing.

Roche's (Boulder, CO) production plant plays an important role in the pharmaceutical research, development and manufacturing activities of its parent company, Roche of Basel, Switzerland. The Boulder manufacturing plant has provided R&D and manufacturing prowess to bring a variety of products to market, some of which include:

- Fuzeon® (enfuviritde), the first in a new class of anti-HIV drugs known as fusion inhibitors, which prevents the HIV virus from infecting healthy T-cells. The active ingredient in Fuzeon is a 36-string amino acid peptide considered the most complex drug ever chemically synthesized at such a large scale.
- Valcyte® (valganciclovir) and Cytovene® (ganciclovir), antiviral agents prescribed to prevent and slow the spread of cytomegalovirus infection in immunocompromised individuals, including transplant recipients and people with AIDS.
- Rocaltrol®, used for the treatment of bonereducing osteoporosis.

PEPTIDE PRODUCERS

AmideBio (Boulder, CO) is a biotechnology company focused on providing peptide and protein research reagents and clinical products for a diverse array of research and

commercial targets. The Company is focused on addressing the challenges of historically difficult-to-manufacture peptides by using their proprietary technology to minimize toxicity during bacterial growth and reduce the chemical synthesis waste stream. By enhancing yield and simplifying downstream processing, the Biopure-ProcessTM reduces the overall costs of development, including both materials and purification, while accommodating the production of long, toxic and hydrophobic peptides.

CBL (Chemical and Biopharmaceutical Laboratories) (Boulder, CO) is a global peptide manufacturing technology company providing the industry with novel chemistries in key areas of solid phase peptide and organic synthesis. Products in the CBL catalog number in the hundreds.

PHARMA CONTRACT MANUFACTURING

TOLMAR (Fort Collins, CO) is a pharmaceutical R&D, manufacturing and commercial operation company that develops and manufactures both proprietary and generic pharmaceutical products in the dental, dermatology and oncology arenas. The Company has a wide variety of production capabilities, including creams, ointments, gels, solutions, liquids, injectables, and powder fill. Their production facilities include chemistry and microbiology laboratories, multi-shift production operation, cGMP- and EU cGMPcompliant manufacturing, liquid, semi-solid, lyophilization, and injectable filling lines as well as warehouse and cold-chain distribution capability. Tolmar has 15 approved and marketed products. Additionally, TOLMAR has three developed products are in active clinical trials, five under review at the FDA, and eight products are in the development stage. Company specializations include formulation and analytical development, primary package design and development, as well as IND, ANDA and NDA CMC support.

MEDICAL DEVICE MANUFACTURING

Baxa Corporation (Englewood, CO) was founded in 1975 with a mission to develop innovative products of superior quality for hospital pharmacies nationwide. In 2010, Baxa doubled its production cleanroom space and added assembly and warehouse space, expand-

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ing capacity to meet customer demand and ensure on-time product shipments to customers around the world. The facility features 27,000 ft2 for manufacturing with an 8,000 ft2 ISO Class 8 (equivalent to a Class 100,000) cleanroom and and a 30,000 ft2 warehouse.

Baxa products, systems and professional services now encompass virtually every facet of compounding and dispensing fluid medications. Currently, more than 3,000 hospitals worldwide use Baxa products every day to produce more than 450,000 safe medication doses.

Biotricity Medical (Aurora, CO) is a medical device research and manufacturing company specializing in developing long-term power requirements for implanted devices based on bioelectric generation. The Company is currently focused on EpiVoltTM, an implantable biogenerator that is able to power implanted biomedical devices including pacemakers, insulin pumps, Cochlear implants, artificial retinas and vagal nerve stimulators. The device creates electricity indefinitely and provides a long lasting power source for implanted medical devices,

designed to function for greater than 15 years of uninterrupted power.

C5 Medical Werks (Grand Junction, CO) serves medical manufacturers by offering state-of-the-art ceramic manufacturing, materials expertise, and custom engineering support to prototype and commercialize their designs and patents. The Company focuses on the orthopedic, dental and spine implant markets.

CaridianBCT (Lakewood, CO) origins date back to 1964 when founders Bob Collins and Ran Bellows established COBE Laboratories to meet emerging needs for custom heart-lung tubing packs. COBE Laboratories evolved into a market leader in the automated blood component processing technology and medical specialty products industry. In 1990, the Company was acquired by Gambro, a publicly traded, multinational health care company based in Sweden and in 2011 CaridianBCT was acquired by Terumo in 2011. The Company works to maintain its position as a leading global manufacturer and provider of products in apheresis collections, therapeutic apheresis, cell therapy systems, whole blood processing and pathogen reduction technologies.

Covidien (Boulder, CO) began in 1967 as Valleylab and has been a world leader in the design, manufacturing and marketing of advanced energy-based medical systems, instruments and accessories. While the Company's ongoing R&D is aimed at providing next generation solutions for an array of surgical and oncological challenges. Energy-based technologies harness electricity for surgical and other healthcare procedures such as ablation. The Covidien team works locally to develop, manufacture and market innovative interventional oncology solutions that focus primarily on ablation products.

Mountainside Medical (Boulder, CO) specializes in the contract manufacturing of complex, tight tolerance medical device components and instruments. The Company offers a diverse array of value-added manufacturing services with a primary core competency in high precision machining, with a specialization in laparoscopic instruments and jaws, orthopedic implants and instruments, product prototyping and pilot manufacturing.





CHANGING THE LIVES OF PATIENTS FOR THE BETTER:

THE TRUE MEASURE OF SUCCESS FOR COLORADO'S BIOSCIENCE INDUSTRY

BY CASEY DEMCHAK

n the ongoing struggle to generate scientific breakthroughs and attract venture capital and angel investors, the true meaning behind Colorado's bioscience industry sometimes gets overlooked. However, it is never forgotten by the people who feel its profound impact at the very core of their lives.

These are the people whose lives have been saved or uplifted to a much better place because of the research, discovery and development of drugs and medical devices

being done in Colorado. These people are the patients, and their success is the true measure of our success.

As an emergency room nurse at Longmont United Hospital for 31 years, Marsha Ruggeri has helped ease the pain of others through her dedication to care giving. Her commitment to helping is a natural extension of the care she has always given her 19-year-old daughter, who has a disability that has required Marsha to lift her since she was a child.

Over the years the physical nature of her

work and parenting took an enormous toll on the congenital pars defect in lumbar five of her spine, which required an L5-S1 spinal fusion. Marsha also suffered from bilateral spinal stenosis. Put simply, all of this translated into a lot of pain.

To decrease blood loss and achieve an improved outcome, neurosurgeon Dr. Lee Nelson of Boulder Neurosurgical & Spine Associates advised Marsha to have her surgery at Exempla Good Samaritan Medical Center in Lafayette, CO. This would enable him to utilize Medtronic's O-arm® imaging and StealthStation® navigations systems during her procedure.

"Dr. Nelson used the Medtronic systems to help minimize the invasiveness of my surgery and to help assure success," says Marsha. "He told me he could not have performed my surgery without these Medtronic devices because they made the procedure quicker,

Having worked with Dr. Nelson in emergency room settings, Marsha felt a high level of trust when he said using the Medtronic systems would be a key to her surgery and recovery. "The end result has been quite good," reports Marsha. "I was able to go back to work after six weeks, but I really feel I could have been back with my colleagues after four weeks had Dr. Nelson given me the go ahead."

more safe and efficacious." Marsha Ruggeri, Longmont, CO-

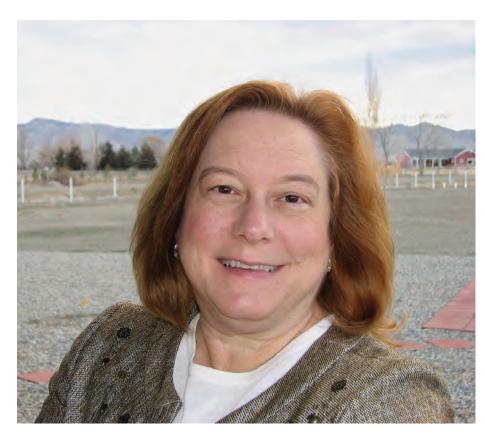
received successful back surgery that utilized Medtronic's O-arm® imaging and StealthStation® navigations systems.

Amy Becktell of Grand Junction, CO, had progressive, bi-lateral, hereditary, sensorineural hearing loss since her late teens. In 2009 at age 53, she decided to have simultaneous bi-lateral implant surgery with the CochlearTM Nucleus® 5 system to help improve her hearing, communication and quality of life. "I had one life before my CochlearTM implants, and a much better life after I received them," states Amy. "It's that extreme. I now have a brand new life. There's really no comparison to how much I'm understanding and how much better I feel in social situations."

Amy further states, "My CochlearTM Nucleus® 5 implants have made a big difference at work, on the phone, and they have even improved my relationship with my husband. It feels great to know that this is now my new normal."

Amy also actively participates in the online Cochlear™ Community. "I enjoy checking in to get updates on how fellow implant recipients are doing," she says. "It's a great place to talk and learn about technology, and it's also a good place for people to express emotions they might not otherwise share with others who are not familiar with what they are going through."

Her dedication to fellow implant recipients is evident by Amy's leadership in the support group, Hearing Loss Association of America (HLAA), and in the Cochlear Awareness



Amy Becktell, Grand Junction, CO—recipient of CochlearTM Nucleus[®] 5 implants

Network volunteer program. Cochlear is a very active supporter of HLAA, and today Amy is working to get an HLAA chapter established in Western Colorado.

Marsha's and Amy's stories would not have been possible without the success of two Colorado companies in discovery and commercialization. They serve as a reminder that the greatest contribution bioscience companies make is to improve the lives of patients.



UNIVERSITY OF DENVER

START FROM A HIGHER PLACE

Division of Natural Sciences & Mathematics



Offering Ph.D. and M.S. Programs in Biophysics, Biochemistry & Biology

Stipend and Tuition Support Available for Competitive Applicants

For More Information on the Programs and Deadlines: www.du.edu/nsm



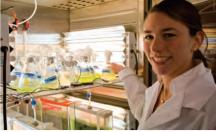
CSU Ventures Innovation at Work

From promising discoveries to innovations that change the world, CSU Ventures' Technology Transfer and Enterprise programs provide the catalyst for growth, partnerships and new opportunities.

Simply Put, We Roll Up Our Sleeves to Move Research Innovations to Market.









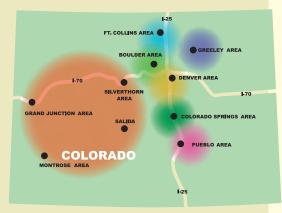


First class bioscience incubation facilities and systems in CSU's Research Innovation Center www.csuric.org

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MEDICAL DEVICE AND RELATED COMPANIES

2C TECHNOLOGIES

Denve

Development, validation, and commercialization of "SeeQ" intraocular implant as a next generation in vivo system for stimulating degenerated retinal cells and restoring vision.

ABILITIES UNLIMITED

Colorado Sprinas, Denver

www.auiop.com

Provides artificial limbs and custom orthopedic appliances.

ABLE PLANET

Wheat Ridge

www.ableplanet.com

Able Planet and its award-wining LINX AUDIO™ are changing the lives of millions of people worldwide, one customer at a time. Able Planet is developing an extensive line of audio and communications products that are usable by people with all levels of hearing, and provide a means whereby users can listen at lower volumes without compromising full rich sound. Able Customers include all people who want access to audio and communication devices, and with LINX AUDIO™, "It is Possible™". Able Planet is rapidly expanding its product portfolio. Please become a member by logging into our website, and then visit us often to see what's new.

ABLELINK TECHNOLOGIES

Colorado Springs

www.ablelinktech.com

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

ABOUT PACKAGING ROBOTICS

Thornton

www.aboutpackagingrobotics.com

Produces robotic package handling systems. The 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 are currently used in the medical, industrial and food industries.

ACCELLENT

Englewood, Longmont

www.accellent.com

Accellent is the best provider of comprehensive supply chain solutions, and we are always striving to be more responsive to our partners. With our Accellent Focus we continue aiming at doing just that.

ACCELR8 TECHNOLOGY CORPORATION

Denve

www.accelr8.com

Develops medical diagnostic technologies for research and clinical applications. The primary focus is rapid, integrated bacterial analysis system designed to identify, count, and provide complete antibiotic susceptibility data by bacterial species within a few hours of sample injection without prior culturing.

ACCU-TUBE CORPORATION

Englewood

www.accutube.com

Manufactures standard and custom size stainless steel hypodermic medical tubing.

ACTALL SECURITY PRODUCTS

Denver

www.actallsp.com

Engineers, manufactures and markets wireless systems for hospital and pharmaceutical company facilities.

ADVANCED MICROLABS, LLC

Fort Collins

www.advancedmicrolabs.com

Researches and develops chemical analytical instruments in 'Lab-on-a-chip' format.

ADA TECHNOLOGIES, INC.

Littleton

www.adatech.com

Designs and manufactures prosthetic and orthotic components.

ADVANCED RESEARCH INSTRUMENTS CORPORATION

Golden

www.aricorp.com

Produces preamplifiers for PMT's and electron multipliers, high voltage power supplies, counters and timers, precision rate meters, and image analyzers for scanning electron microscopes.

AEROPHASE, INC.

Longmont

www.aerophase.com

Research and Development of technologies that reduce environmental impact, help economically disadvantaged people, and improve healthcare. Including low cost, environmentaly friendly Meter Dose Inhaler and iproved Aerosol Therapy for Lung Cancer.

AESTHETIC TECHNOLOGIES

Golder

www.atimed.com

Manufactures and sells Parisian Peel® brand microdermabrasion systems and accessories along with skin care products to medical, and spa professionals.

AESTIS, INC.

Boulder

www.aestis.com

Develops a treatment for obesity through controlled hypoxia technology. The two principal components are the air separation unit and proprietary control system.

AGILENT TECHNOLOGIES

Roulder

www.agilent.com

Provides core electronic and bio-analytical measurement tools to advance life science research.

AIRLIFT UNLIMITED, INC.

Everareen

www.airlift.com

Develops and manufactures soft-sided oxygen carriers.

AKTIVAX

Boulder

www.aktivax.com

AktiVaxTM is developing novel reconstitution, safety syringes for vaccines and biologics.

ALLERGAN, INC.

Denve

www.allergan.com

Continually conduct research to develop products that enable medical specialists to help people preserve and protect their vision, move freely, best express their inner beauty and lead healthy and active lives.

ALLISON MEDICAL INC

Littleton

www.allisonmedical.com

Develops products to assist specialists in the medical and veterinary industries, and have designed and provided essential syringes, needles and custom items for various industries.

ALLOGENESIS LLC

Denve

www.genbiomed.com

Created purified human platelet mixture from platelets contained in blood (from blood banks) that holds promise to replace current growth media for stem cells. The company's pHMP product promises to offer researchers more affordable animal-free option capable of working across applications.

ALLOSOURCE

Centennial

www.allosource.com

Develops, processes and distributes lifeenhancing bone and tissue allografts to the medical community.

ALLPRO

Broomfield

www.allprodental.com

Produces a large selection of non-latex prophy cups, prophy angles and other dental products.

ALPHA MOLD WEST

Proomfield

www.alphamoldwest.com

Plastic injection mold-making facility for the medical industry.

ANALYTICAL SYSTEMS RESEARCH, INC.

Aurore

www.asremed.com

Analytical Systems Research, Inc. (ASR) is a software development company seeking to provide patient management tools to the practicing physician. ASR seeks to offer the medical community a new approach to the EHR (Electronic Health Record) based on a webbased, point-of-care software.

ANIMAL CARE SYSTEMS, INC.

Centennia

www.animalcaresystems.com

Provides innovative rodent caging systems for the life-science industry.

ANIMARK, INC.

Aurora

www.animark.us

Manufactures and sells ultrasound pregnancy detectors and ovulation predictors for livestock breeding.

APDYNE MEDICAL COMPANY

Danva

www.apdyne.com

Manufactures and distributes the Apdyne Phenol Applicator Kit used to anesthetize the tympanic membrane during in-office myringotomy procedures.

AQUEOUS BIOMEDICAL

Colorado Springs

www.aqueousbio.com

Develops biocompatible materials and geometric designs that can be applied to stents, shunts, artificial organs and drug delivery devices. Their first product, the OculieveTM shunt, is designed to control over-pressurization inside the eye caused by glaucoma.

ARCSCAN, INC.

Morriso

www.arcscan.com

ArcScan, Inc. has developed break though imaging technology for the eye. Many ophthalmologists feel its patented Artemis 3 (shown above) VHF Ultrasound Arc Scanner will change ophthalmology the way MRI changed radiology.

ARCTURUS STAR PRODUCTS LLP

Cortez

www.arcturusstar.com

Arcturus Star Products is dedicated to pioneering Vibrational Energy Therapy for the wellness and beauty professions. Vibrational energies incorporate subtle low frequencies of light, sound, and electrical waves. Their therapeutic specialty is in the area of lymphatic health.

ASPIRE BIOTECH, INC.

Colorado Springs

www.aspirebiotech.com

Provides contract services for all phases of product development from concept to launch, and produces its own skin sealant and wound-closure adhesives.

AURI-STIM MEDICAL

Donvo

www.net1device.com

Offers an alternative therapy for migraine headaches, hormonal migraine, chronic headaches, premenstrual syndrome (PMS), nicotine and narcotics addictions using the NET-1000 device.

AVANTES

Broomfield

www.avantes.com

Produces, develops and sells spectrometers, light sources, fiber optic multiplexer, fiber optic cables, software, fiber optics, accessories to the medical device industry.

BAL SEAL ENGINEERING, INC.

Colorado Springs

www.balseal.com

Produces seals and canted-coil springs for sealing, holding, latching, and electrical contact in a variety of applications throughout the medical market.

BAXA CORPORATION

Englewood

www.baxa.com

Develops and manufactures products for preparing, handling, packaging and administering fluid medications.

BEACON BIOTECHNOLOGY

Aurord

www.beaconbiotechnology.com

BP Proteomics, ProLume Ltd, and Black Forest Engineering, LLC have come together to create Beacon Biotechnology to pursue new opportunities that build upon their respective scientific expertise.

BEAMONE, LLC

Denvei

www.beam-one.com

Offers electron beam sterilization for medical and pharmaceutical devices.

BECKMAN COULTER

Fort Collins

www.beckmancoulter.com

Develops and produces instruments for the diagnostic industry. Specializes in the fields of immunocytochemistry, flow cytometry, and microbiology.

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BELL DENTAL PRODUCTS, LLC

Englewood

www.belldental.com

Designs, develops, and manufactures precision dental equipment based on electric motor technology.

BYERS PEAK

WheatRidge

byerspeak.com

Leading contract manufacturer of low to medium volume, complex products for the medical device, biotech and industrial instrumentation markets.

BIOCARE SYSTEMS, INC.

Parke

www.biocaresystems.com

Designs, develops and markets patentprotected, FDA cleared, new health-care devices (LumiWaveTM) that use deep-tissue light therapy to decrease pain, accelerate healing and improve quality of life.

BIODESIX, INC.

Aurora, Broomfield

www.biodesix.com

Provides clinically reliable methods for the early detection, diagnosis, therapeutic guidance, and monitoring in cancer and degenerative diseases.

BIO-LOGISTICS PRECLINICAL, INC.

Pierce

www.bio-logistics.com

Offers engineering and regulatory support and preclinical strategic development to the medical device industry.

BIOPTIX LLC

Boulder

www.bioptixinc.com

Develops technologies to detect trace amounts of bacteria, viruses, proteins, nucleic acids, antibodies and human micro RNA's.

BIOTRICITY MEDICAL INC.

Auror

www.biotricitymedical.com

Research and manufacturing company specializing in developing long-term power requirements for implanted devices based on bioelectric generation.

BIOVISION TECHNOLOGIES, INC.

Golder

www.biovisiontech.com

Develops and manufactures micro-visualization solutions that enable endoluminal and minimally invasive medical procedures in both human and veterinary medicine. The imaging technologies and customized micro-endoscope solutions are integrated to reduce incision size and speed healing.

BOULDER INNOVATION GROUP, INC.

Boulder

www.boulderinnovators.com

Develops and manufactures image-guided surgical navigation digitizers and industrial 3D capture and modeling equipment.

BRAUN BIOSYSTEMS, INC.

Centennia

www.braunbiosystems.com

Provides diagnostic point of care coagulation management systems that have a positive impact on patient outcomes in hospital, outpatient, and home healthcare venues.

BROADWEST CORPORATION

Denve

www.broadwest.com

Develops and manufactures ergonomic mammography viewing equipment.

C5 MEDICAL WERKS

Grand Junction

www.c5medicalwerks.com

Offers ceramic manufacturing, materials expertise, and custom engineering support to prototype and commercialize designs and patents to orthopedic companies for hip, spinal and dental implants.

CANBERRA INDUSTRIES

Greenwood Village

www.canberra.com

Manufactures and supplies analytical instruments, systems and services for radiation detection and radiation monitoring.

CAR-MAY L.L.C.

Berthoud

www.car-may.com

Unlike basic metering pumps, Car-May's systems provide pumping capability, fluid measurement, and flow control all in one compact module.

CARE ELECTRONICS, INC.

Boulde

www.medicalshoponline.com

Offers a range of electronic monitoring and alarm equipment for the home health and long term care markets.

CARIDIANBCT

Lakewood

www.caridianbct.com

Develops and manufactures automated blood collection systems and related information systems. Developing cancer therapies and vaccines through therapeutic apheresis and cell therapy. Developing pathogen reduction technologies.

CAROBA PLASTICS, INC.

Englewood

www.caroba.com

Provides custom injection molds and specializes in the needs of the medical and high technology industries

CARSAN ENGINEERING, INC.

Golde

www.carsaneng.com

Designs and manufactures products for several of the leading OEMs in the medical, dental, industrial, semiconductor, entertainment, and video projection markets.

CEA TECHNOLOGIES, INC.

Colorado Springs

www.ceatechnologies.com

Provides product development and complete product assembly and packaging services to the medical industry.

CERAPEDICS, INC.

Westminster

www.cerapedics.com

Globally supplying the orthopedic and spinal communities with quality products, services and educational opportunities to improve patient outcomes.

CERESCAN

Denver

www.cerescanimaging.com

Denver-based corporation, in 2008, they acquired the assets and imaging database of Brain Matters Inc., a company previously engaged in providing functional brain imaging for almost five years. Anticipates opening 20 additional centers across the nation.

CERTOL INTERNATIONAL, LLC

Commerce City

www.certol.com

Provide patients and healthcare professionals with innovative products and responsible solutions to the complicated infection control challenges of the 21st century.

CLARIMEDIX, INC.

Boulder

www.clarimedix.com

Develops quantum devices for the temporary relief of minor muscle and joint pain, arthritis, muscle spasms and stiffness.

CLEAN ROOM DEVICES, LLC

Westminste

www.cleanroomdevices.com

Manufactures products that are engineered specifically for "clean room" environments.

CLIFFORD CONSULTING & RESEARCH, INC.

Colorado Springs

www.ccrlab.com

Clifford Materials Reactivity Testing (CMRT) is a laboratory screening process used to help identify existing sensitivity problems to various chemical groups and families of compounds in an individual patient. This process is currently being implemented in the CMRT Dental and Orthopedic panels.

COBE LABORATORIES, INC.

Lakewood

303-232-6800

EtO (ethylene oxide) sterilization facility with services offered to third party customers. Has fulfilled requirements for EPA, FDA, ISO and OSHA compliance. (Owned Subsidiary of Gambro AB)

COCHLEAR AMERICAS

Centennia

www.cochlearamericas.com

Designs, manufactures and distributes hearing implants including the Nucleus Freedom and Baha implants.

COLDQUANTA, INC.

Boulder

www.coldquanta.com

Focuses on the development of BEC (Bose-Einstein Condensate) generating devices and systems, allowing them to be accessible to a wide range of research, educational, and industrial institutions. Our products are intended for use in scientific and industrial applications requiring high performance and reliability.

COLORADO LASER TECHNOLOGIES, INC.

Colorado Springs

www.coloradolasermarking.com

Provides YAG laser engraving technology, as well as CO2 and YAG laser cutting services.

COLORADO PRECISION PRODUCTS, INC.

Boulder

www.coloradoprecision.com

Provides diamond turned and polished optics/ parts. Fabricator of X-ray telescope optical components. Produces and offers air bearing LVDT contact linear measurement systems, .05 microinch resolution.

COMEG U.S.A. ENDOSCOPY, INC.

Denvei

www.comeg.de/eng

A product range producing high quality video imagery that meets the needs of the surgeons in terms of products, budget and services, whatever their specialty.

CONFI-DENTAL PRODUCTS COMPANY

Louisville

www.confi-dental.com

Manufacture a wide range of dental and healthcare products including composites, cements, creams, lotions & ointments.

CONMED ELECTROSURGERY

Centennia

www.conmed.com

Designs and manufactures RF electrosurgical generators and accessories of the highest quality, safety and value for use in surgical procedures performed in virtually every hospital, surgery center and physicians office.

COORSTEK

Golden

www.coorstek.com

Using our core strengths of custom engineering, materials expertise, operational excellence, and rapid execution, we help our customers develop amazing solutions to their toughest technical challenges. Our experienced engineering and manufacturing experts are ready to help with your next project.

CORGENIX MEDICAL CORPORATION

Rroomfield

www.corgenix.com

The Colorado facility is engaged in research, development, manufacture, and marketing of in vitro diagnostic products for use in disease detection and prevention.

COVIDIEN

Boulder

www.covidien.com

Offers an extensive product line, including pulse oximetry and airway and temperature management devices, ventilators, vessel sealing, and electrosurgery equipment.

CROSSTREES MEDICAL, INC.

Boulder

www.xtreesmed.com

Aims to improve the quality of patient care by developing the next generation platform for percutaneous vertebral augmentation.

CRYENCO/CHART DENVER

Denve

www.cryenco.com/

Chart Denver provides manufacturing services to companies who want to out-source some or all of their manufacturing processes, and to companies that have capacity issues with their current manufacturing resources.

CYTOLOGIC

Commercialization of an immunotherapy device for treatment of cancer.

DARKHORSE TECHNOLOGIES

Boulder

bparks@colorado.edu

Commercializes a patented technology for affordable, hand-carried, battery operated instruments for on-site genetic detection using Polymerase Chain Reaction (PCR).

DATAWAVE TECHNOLOGIES CORPORATION

Berthoud

www.dwavetech.com

Manufactures a wireless and battery-free device for acquiring and transmitting data from electrodes and other biosensors to a receiver placed meters away for electrophysiology, neurophysiology and physiology related research on both humans and large animals.

DCS SURGICAL

Aurora

Early stage company formed to evaluate potential new surgical procedures for the treatment of sinusitis.

DENVER INSTRUMENT COMPANY

Denve

www.denverinstrumentusa.com

Designs and manufacturers analytical balances, electrochemistry instruments, moisture analyzers, and titration controllers.

DENVER OPTIC COMPANY

Englewoo

www.eyeprosthetics.com

Specializes in the fitting and fabrication of two types of ocular prosthesis.

DESERT GLASS WORKS

Colorado Springs

www.dgw.com

Manufactures quartzware for the medical and research industries.

DIE CUT TECHNOLOGIES

Northglen

www.diecuttech.com

Offers precision material conversion, skilled assembly and manufacturing efficiencies, including cleanroom facilities.

DIRECTED ENERGY SOLUTIONS

Colorado Springs

www.denergysolutions.com

Develops advanced laser and optical device solutions for medical applications.

DNTLWORKS EQUIPMENT CORPORATION

Centennia

www.dntlworks.com

Manufactures portable, mobile and self-contained dental systems.

DPIX, INC.

Colorado Springs

www.dpix.com

Produces high-resolution amorphous silicon (a-Si) sensor arrays for medical X-ray imaging.

E.I. MEDICAL IMAGING

Loveland

www.eimedical.com

Manufacturer of highly portable and ruggedized ultrasound devices for the veterinary industry. E.I. Medical Imaging engineers, manufactures and services these devices in Loveland, Colorado.

ELDON JAMES CORPORATION

Lovelan

www.eldonjames.com

Designs and manufactures a diverse line of plastic and stainless steel hose fittings with a single-barb design.

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ELECTRONIC MATERIALS, INC. (EMI)

Breckenridge

www.emiuv.com

Offers a complete line of EMCAST UV adhesives, epoxies, sealants, encapsulants and coatings, EMI also offers room temperature, thermal and Visible light cure adhesive systems.

ELLAB, INC.

Centennia

www.ellab.com

Manufactures thermal validation solutions for food and pharmaceutical industries.

EMPIRICAL TESTING CORPORATION

Colorado Springs

www.empiricaltesting.com

Provides medical device testing services that add value throughout the product development cycle, with a focus on spinal implant device testing.

ENCISION, INC.

Boulder

www.encision.com

Designs and manufactures innovative surgical devices. Developed AEM® Laparoscopic Instruments to improve electrosurgery and reduce the chance for patient injury in minimally invasive surgery.

ENDOSHAPE, INC.

Boulder

www.endoshape.com

Manufactures surgical and medical instruments focusing on shape memory polymer devices for endolumenal application.

ENPLAS CORPORATION

Colorado Springs

www.enplas.com

Enplas is striving to gaze into the future through "OPTPLANICS": a new concept that fuses the latest optical and electronics technologies on the basis of engineering plastics, the highly functional materials that Enplas has been pursuing since its inception.

EVERGREEN RESEARCH, INC.

Golder

www.evergreenresearch.com

Offers a complete range of development services from product definition and feasibility studies through detailed design to pilot-run and lowvolume production to the medical device industry.

EVEIA MEDICAL

Boulder

www.eveiamedical.com

Development stage company focused on creating a bioanalytical system designed to conduct immunassay tests. Ky attributes include; lowfemtomolar sensitivities, short assay development cycles and results in 10-20 minutes. The product consists of the instruments, software and reagents required for analyte measurement.

EXTREME DIAGNOSTICS

Roulder

www.extremediagnostics.com

Develops noninvasive measurement systems, including optical systems such as custom holographic and interferometric instruments. Specializes in structural health monitoring, nondestructive testing, and materials processing.

FALCON REHABILITATION PRODUCTS

Denve

www.falconrehab.net

Designs and builds high quality, innovative quadriplegic seating systems and accessories (Falcon Rehabilitation Products, LaBac Seating Systems, Gel Ovations).

FIREFLY MEDICAL, INC.

Fort Collins

www.fireflymedical.com

Designs and develops innovative durable medical equipment for clinical healthcare markets.

FISCHER MEDICAL TECHNOLOGIES, INC.

Broomfield

www.fischermti.com

Designs, manufactures, and markets imaging systems for the screening and diagnosis of breast cancer.

FLUONIC

Boulder

www.fluonic.com

Develops infusion therapy systems with disposable sensors for OEM and proprietary pumping systems.

GAMBRO AMERICAS

Lakewood

www.usa-gambro.com

Develops and supplies hemodialysis, peritoneal dialysis and acute dialysis products, therapies and services.

GE ANALYTICAL INSTRUMENTS

Boulder

www.geinstruments.com

Manufactures instruments used to measure total organic carbon (TOC) in water for pharmaceutical applications and medical research.

GENESEE BIOMEDICAL, INC.

Denve

www.geneseebiomedical.com

Manufactures cardiac surgery instruments and devices.

GNATHODONTICS, LTD.

Lakowood

www.gnatho.com

Specializes in functional dentistry, advanced implant work, precision partial dentures, combination cases and metal-free fixed restorations.

GREAT BASIN SCIENTIFIC

Longmont

www.gbscience.com

Technology entails an integrated disposable cartridge containing all necessary reagents and an inexpensive benchtop analyzer that executes the assay, interprets the results and provides electronic output to the clinician that is fast, accurate, cost-effective and easy-to-use.

HACH COMPANY

Loveland

www.hach.com

Manufactures and distributes analytical instruments and reagents used to test the quality of water and other aqueous solutions.

HEI ADVANCED MEDICAL OPERATIONS

Boulder

www.heii.com

Develops and manufactures high performance components, medical software, medical devices, and non-medical products. Produces microcircuits and subsystems for hearing and medical applications.

HIRSH PRECISION PRODUCTS, INC.

Boulder

www.hppi.com

Manufactures precision-machined and assembled components for the medical industry.

IBALANCE MEDICAL, INC.

Boulder

www.ibalancemedical.com

Develops a solution for knee malalignment that preserves and restores natural knee surfaces. The Axial Knee Realignment System (AKRFX) comprises both a new surgical technique and an anatomic-based, knee implant system.

ILLUMASONIX LLC

Auror

www.alliedminds.com/Portfolio/Illumasonix/index.htm

In partnership with Allied Minds, we will develop and commercialize a new non-invasive vascular disease detection procedure which will provide near real-time assessment of detailed blood flow patterns within the cardiovascular system.

INDEVR, INC.

Boulder

www.indevr.net

Develops and manufactures biomedical instruments including molecular diagnostic assays, virus measurement systems and detection technologies for micro-arrays.

INFINITY PHOTO-OPTICAL COMPANY

Boulder

www.infinity-usa.com

Manufactures long-distance and continuouslyfocusable microscope technology, macro systems, internal-focusing devices and other lenses.

INJECTECH, LLC

Loveland

www.injectech.net

Provides molding, assembly and design of medical components and fittings for OEM device manufacturers. Class 100,000 cleanroom molding and assembly available.

INSTEC, INC.

Boulder

www.instec.com

Manufactures precision temperature controllers and microscope hot stage systems for temperature cycling, food sciences, materials characterization, forensics, polymers and liquid crystals and microbiology.

INTERTEK

Boulder

www.intertek.com

Offers testing, inspection and certification of products, commodities and systems for medical devices. Performs FDA 510(k) reviews, electrical safety certification including CE Marking, testing to the MDD and IVDD, risk analysis, EMC and performance testing.

INVITRIA

Fort Collins

www.invitria.com

InVitria develops, manufactures and markets a portfolio of high performance and well defined cell culture products and reagents used in bioprocessing, biopharmaceutical formulation, stem cell & regenerative medicine, life science research and diagnostics.

IPAX, INC.

Englewood

www.ipaxinc.com

Assembles and packs medical products, focusing on bringing new medical products to the marketplace. Specialty is small to medium production runs, also has the capacity and the manpower to take on the larger jobs.

JORGENSEN LABORATORIES, INC.

Loveland

www.jorvet.com

Designs and manufactures instruments which are used in the animal health field including specialty instruments, surgical suture, and veterinary equipment.

KENT SYSTEMS

Loveland

www.kentsystems.com

KENT Systems designs, manufactures, and distributes Plastic Quick Couplings, Tube Fittings, and Media Bags. All our products are made in Colorado!

KESTREL LABS, INC.

Roulder

www.kestrellabs.com

Kestrel Labs combines internal research and development projects with consulting and contract development of innovative, patient monitoring concepts and other medical technologies.

LANX, LLC

Rroomfield

www.lanx.com

Specializes in systems and implants for all segments of spinal surgery. Integrating leading technology, intellectual property and state-of-the-art engineering, each product is designed to simplify surgery and improve the quality of care for patients worldwide by providing surgeons with innovative spinal products.

LEAP FROGG, LLC

Grand Junction

970-260-7494

Created The Frogg® Dynamic Compression System which Can Be Used at All Times; No Gaps in Protection; Reduces Accidents; Reduces Nursing Time; Is More Comfortable.

LEEDS PRECISION INSTRUMENTS, INC.

Denve

www.leedsmicro.com

Offers microscopes and custom-engineered products ranging from small modifications on a microscope stand that accommodate specific applications, to large specialized systems, such as an optical comparison bridge for forensic science.

LENOX MACLAREN SURGICAL INSTRUMENTS

Louisville

www.lenoxmaclaren.com

Manufactures precision orthopedic and neurological surgical instruments.

LEXICOR MEDICAL TECHNOLOGY LLC

Boulder

www.lexicor.com

Develops neuropsychiatric medical devices, such as NebaTM an experimental, small format EEG-based device being studied under an Investigational Device Exemption from the Food and Drug Administration.

LIFETIME MEDICAL

Fort Collins

LOGISENS CORPORATION

Fort Collins

www.logisens.com

Develops biosensor and software technology, enabling a significant breakthrough in real-time measurement and reduction of stress.

MAGNELAB, INC.

Longmont

www.magnelab.com

Manufactures custom magnetic components (transformers/inductors) for the medical field.

MASSIVELY PARALLEL TECHNOLOGIES, INC.

Roulder

www.massivelyparallel.com

Focuses on the entire communication task at the cluster level, and optimize it mathematically (22 patents granted or pending); Rigorous algorithms allow a system to manage itself and adapt to changing requirements, at any scale; Libraries self-train on a given hardware configuration, so there is no tradeoff between optimality and generality.

MAYER MEDICAL TECHNOLOGIES, INC.

Grand Junction

www.mayermedical.com

Mayer Medical Technologies, Inc. improves health and saves lives by innovating new products, providing seed capital to medical start-ups, and assisting medical professionals in developing their product ideas.

MBIO DIAGNOSTICS (A DIVISION OF PRECISION PHOTONICS CORPORATION)

Boulder

www.mbiodx.com

Develops a low-cost, high sensitivity, multipathogen detection system for diagnostics.

MEDEFFICIENCY, INC.

Wheat Ridge

www.medefficiency.com

Specializes in total contact casting products for off-loading diabetic foot ulcers.

MEDICAL MODELING, INC.

Golder

www.medicalmodeling.com

Produces highly accurate 3-D physical models of human bone structure from imaging such as CT or MRI.

MEDIVANCE, INC.

Louisville

www.medivance.com

Medivance® is the market leading provider of Targeted Temperature ManagementTM products designed to save lives, restore quality of life and reduce health care costs.

MEDTRONIC NAVIGATION

Louisville

www.medtronicnavigation.com

At the forefront of surgical navigation solutions, guiding the industry to a higher standard of care for several clinical specialties, including cranial neurosurgery, functional neurosurgery, spinal, ENT, joint replacement and orthopaedic trauma surgeries.

BIOSCIENCE COLORADO 2010/2011

MEINHARD GLASS PRODUCTS

Golder

www.meinhard.com

Continues the evolution in nebulizer design. The principle 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.

MESA LABORATORIES, INC.

Lakowoo

www.mesalabs.com

Provides dialysis meters and related supplies to dialysis clinics world wide.

METAMATRIX, LLC

Boulder

www.zorbent.com

Manufacturers of ZORBENT which absorbent is designed to leave no residue, reducing the risk associated with slippery surfaces and is completely safe to use and represents no health hazard.

MICRO IMAGING SOLUTIONS, LLC (MIS)

Englewood

www.micro-imaging.us

Developed an innovative-patented technology that can be utilized in the manufacture of microdigital CMOS cameras.

MICROLIFE MEDICAL HOME SOLUTIONS, INC.

Golder

www.mimhs.com

Microlife Medical Home Solutions is dedicated to meeting the needs of healthcare providers and their busy medical practices. Our proprietary hand-held medical devices and systemic solutions offer healthcare providers evidence-based and practice-tested methods for accurate assessment, diagnosis, and treatment of cardiovascular and metabolic diseases.

MICROPHAGE, INC.

Longmont

www.microphage.com

Produces high-speed bacteria detection technologies to commercialize in markets including: food safety, water safety, clinical and veterinary diagnostics and detection applications.

MIKRON CORPORATION DENVER

Aurora

www.mikron.com

Supplies transfer machining systems for complex parts, cutting tools with high performance standards, self medication and diagnostic devices.

MIND STUDIOS

Colorado Springs

www.mind-studios.com

A full service product design and research studio housed within the University of Colorado at Colorado Springs. Offers concept generation, advanced prototyping, engineering and consumer research, human factors design and manufacturing solutions.

MOUNTAINSIDE MEDICAL

Boulder

www.mountainsidemed.com

Specializes in the contract manufacturing of medical device components and instruments, including electrosurgical and laparoscopic instruments and jaws, orthopedic implants, endoscopy devices.

NSPIRE HEALTH, INC.

Lonamont

www.nspirehealth.com

Develops, manufactures and markets respiratory care products and services focused on cardiopulmonary diagnostics, respiratory core lab services, and disease management solutions.

OLYMPUS SOFT IMAGING SOLUTIONS CORPORATION (OSIS)

Lakewoo

www.soft-imaging.de

Produces, markets, and sells image acquisition and processing software and hardware for all areas of electron microscopy.

OPTIBRAND LTD., LLC

Fort Collins

www.optibrand.com

Provides a fraud-resistant system to positively identify animals from birth and throughout the food processing chain. The Secure Identity Preservation system helps assure food safety and control the spread of animal disease.

OPTIENZ SENSORS

Centennia

www.optienzsensors.com

OptiEnz has revolutionized measurement capabilities for organic chemical concentration; now providing continuous, real-time, in-place sensor solutions.

OTOLOGICS, LLC

Boulder

www.otologics.com

Develops and commercializes surgically implantable alternatives to conventional "in the ear" hearing aids.

OVAL WINDOW AUDIO

Nederland

www.ovalwindowaudio.com

Produces induction loop assistive listening systems and visual and vibrotactile technologies that help deaf and hard of hearing individuals.

PARÉ SURGICAL, INC.

Centennia

www.paresurgical.com

Develops surgical instruments such as the Quik-Stitch endoscopic suturing system.

PARKER MEDICAL

Highlands Ranch

www.parkermedical.com

Provides airway management products that make intubation safer for the patient and easier for the medical professional.

PARTICLE MEASURING SYSTEMS

Boulder

www.pmeasuring.com

Designs, manufactures, and services 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

Lonamont

www.pcc-aft.com

Offers thixoforming and metal injection molding for the medical device industry.

PEAK ROBOTICS, INC.

Colorado Springs

www.peakrobotics.com

Manufactures robots, special equipment, and turnkey automated systems for a variety of industries including: biotech, electronics, medical, semiconductor, etc.

PEDDLE MASTER, INC.

Johnstown

www.peddlemaster.com

Designs and manufactures handicapped driving aids. The Peddel Master is totally portable and can be installed and removed in a matter of seconds.

PERNICKA CORPORATION

Fort Collins

www.pernicka.com

Offers analytical testing that meets or exceeds the requirements of MIL-STD 750/883 method 1018 and 45662A for companies in the semiconductor, aerospace, basic & applied research, surface analysis, thin film deposition, laser technology, and medical products industries.

PHARMAJET, INC.

Golder

www.pharmajet.com

Develops a needle-free technology that has a low cost, single use, disposable polypropylene vial or cartridge, suitable for the delivery of common vaccines and standard dose injectable liquid medicines.

PHILLIPS PLASTICS (FARLEY SALES GROUP)

www.phillipsplastics.com

Phillips Plastics Corporation offers injection molding from design through distribution.

PHYSICAL ACTIVITY INNOVATIONS

Fort Collins

970-217-9340

Developing unique, footwear-based systems that motivate users to increase their daily physical activity.

PICO-TESLA MAGNETIC THERAPIES, LLC

www.pico-tesla.com

Manufactures, markets and supports proprietary medical device technology designed to treat the signs and symptoms of neurological disorders like Parkinson's disease, Alzheimer's, migraines and epilepsy.

PLEXUS CORPORATION

Louisville

www.plexus.com

Provides integrated product development, manufacturing, and sustaining services of medical products.

POLYNEW, INC.

www.polynewinc.com

Develops Polymer ice and methods of making and using them.

PORTA-LUNG, INC.

www.portalung.com

Provides non-invasive ventilator support for long-term patients who need more portability than the iron lung allows, while maintaining the same level of ventilating efficiency.

PRECISION BIOPSY

www.alliedminds.com/Portfolio/Precision_Biopsy/index.htm

In partnership with Allied Minds, we are working to develop and commercialize technology for the accurate diagnosis of prostate cancer which uses advanced spectroscopy imageing techniques in combination with tissue biopsy.

PRECISION DIAGNOSTIC INSTRUMENTS

www.pdimeters.com

Designs and manufactures professional quality, affordable test equipment.

PRECISION GLASSBLOWING

www.precisionglassblowing.com

Provides custom and OEM scientific glass for custom synthesis, pharmaceutical, environmental, petrochemical, research, commercial, government and medical laboratories.

PRECISION PHOTONICS CORPORATION

Roulder

www.precisionphotonics.com

Provide price-competitive laser optics and coatings to the telecommunications, defense, aerospace, biomedical, and semiconductor industries.

PREFERRED MEDICAL PRODUCTS, INC.

www.preferredmedicalproducts.com

Manufactures stainless steel medical components for hypodermic needles and lancet type products.

PRESCOTT'S, INC.

Monument

www.surgicalmicroscopes.com

Provides reconditioned operating microscopes and allied accessories that function as intended by the original equipment manufacturer.

PROBETRONIX, LLC

Colorado Springs

www.probetronix.biz

Manufactures oscilloscope probes.

PRODUCTS GROUP INTERNATIONAL, INC.

www.productsgroup.com

Researches, develops and engineers ultrasound medical and veterinary equipment.

PROTOGENIC, INC. (A DIVISION OF SPECTRUM PLASTICS GROUP)

www.protogenic.com

Manufactures prototypes and conceptual models using stereolithography (SLA) and Laser Sintering (LS) rapid prototyping technology.

PROTOMED, INC.

www.protomed.net

Creates accurate anatomical models from CT scans by using the latest imaging software and laser driven technology.

PROTOTYPE CASTING, INC.

www.protcast.com

Manufactures non-ferrous prototype parts for the medical industry, specializes in RPM (Rubber Plaster Mold) casting, sand casting and rapid investment casting.

PTA CORPORATION

Lonamont

www.ptacorp.com

Manufactures aluminum and steel molds for projects with lifetime runs of 5,000 to 250,000 pieces for medical applications.

QUEST PRODUCT DEVELOPMENT CORPORATION

www.quest-corp.com

Helps bring to market medical products and analytical systems for small start-ups to research universities and international corporations. Has received numerous SBIR/ STTR grants from NIH, DOD, NASA and NIST.

RADIOLOGICAL IMAGING TECHNOLOGY, INC

Colorado Springs

www.radimage.com

Provides clinical and research physicists with a high precision automated QA tool for advanced radiation therapies. Received FDA clearance on RIT113 radiation therapy film dosimetry.

RAND-SCOT, INC.

Fort Collins

randscot.com

Designs and manufactures products for persons with disabilities including BBD Cushions and Mattress Overlays, EasyPivot Patient Lifts, and Saratoga Exercise Products.

RAPID PROTOTYING CORPORATION

www.rapidpro.com

Offers engineering and design and other manufacturing services for the medical device industry.

RJD MACHINING

www.rjdmachining.com

Specializes in precision production runs and some prototype work for OEM's in the medical industry.

ROCKY MOUNTAIN INSTRUMENT COMPANY (RMI) Lafayette

www.rmico.com

Designs and manufactures optics and coatings (ultraviolet through far infrared) for the medical industry.

ROCKY MOUNTAIN ORTHODONTICS, INC. (RMO)

www.rmortho.com

Serves all areas of orthodontics including pediatric orthodontic prevention, interceptive pediatric orthodontics, mixed dentition orthodontics, adult orthodontics, reconstructive dentistry orthodontics, TMJ orthodontics, surgical orthodontics and breathing/sleep problem related orthodontics.

SAMSON DESIGN ASSOCIATES, INC.

www.samsondesign.com

Provides full service product development ranging from concept to production specifications, with many products for the medical field.

BIOSCIENCE COLORADO 2010/2011

SANDHILL SCIENTIFIC

Highlands Ranch

www.sandhillsci.com

Designs, manufactures and distributes diagnostic products focused on gastroenterology.

SECURISYN MEDICAL

Littleton

securisyn.com

Dedicated to a continuous process of increasing the safety and effectiveness of our unique life-saving product, which is utilized by skilled medical practitioners to deliver the highest quality emergency and intensive care to their patients.

SCIENCE CARE

Aurora

www.sciencecare.com

Provide human tissue for medical research and education. We serve as a link between individual donors and medical researchers and educators.

SCIENTECH, INC.

Boulder

www.scientech-inc.com

Manufactures analytical instruments: semimicro balances, analytical balances, semianalytical balances, and toploading balances for the medical industry.

SCOTT ORTHOTIC LABS, INC.

Fort Collins

www.scottorthotic.com

Manufactures Orthotic and Prosthetic Components, Pre-fabricated Orthotics, and Custom O&P Devices.

SEALCON

Centennia

www.sealconusa.com

Manufactures cable management components, including liquid tight strain relief fittings, flexible conduit, M23 circular connectors and related products for the health care industry.

SHAPE OPHTHALMICS LLC

Auror

Develops state of the art devices and novel treatments for ophthalmic conditions through the application of advanced smart materials.

SHIPPERT MEDICAL TECHNOLOGIES CORPORATION

www.shippertmedical.com

Manufactures and distributes medical disposable products and instruments. Serves the ear, nose and throat, plastic surgery, cosmetic surgery, emergency/trauma care, family practice, pediatric, ophthalmology and dermatology fields.

SIENCO, INC.

Arvada

www.sienco.com

Manufactures and distributes Class II medical devices, disposable supplies, reagents and accessories for in-vitro diagnostic use. Also, provides tools for hemostasis monitoring and viscoelastic evaluations.

SNOASIS MEDICAL

Denver

www.snoasismedical.com

Develops dental regenerative products derived from discarded tissues and cells.

SOMALOGIC, INC.

Boulder

www.somalogic.com

Uses aptamer array technology and bioinformatics capabilities to discover diseasespecific biomarkers and protein signatures. Develops medical diagnostics based on these signatures.

SONORA MEDICAL SYSTEMS, INC.

Lonamont

www.4sonora.com

Provides high quality products and services to the diagnostic ultrasound and MRI markets. ISO 9001 certified and FDA registered.

SONTEC INSTRUMENTS, INC

Centennia

www.sontecinstruments.com

Provides a broad line of instruments as well as custom instrument manufacturing and in-house repair service.

SOPHONO, INC.

Boulder

sophono.com

Sophono, Inc. has developed the world's first non-percutaneous, implantable bone anchored hearing device.

SORIN GROUP

Arvada

www.sorin.com

Develops and produces cardiovascular and autologous transfusion therapy products.

SOUND SURGICAL TECHNOLOGIES, LLC

Louisville

www.vaser.com

Offers ultrasonic technologies and related techniques for aesthetic surgery.

SOURCE MDX

Boulder

www.sourcemdx.com

Develops RNA-based biomarkers to create companion diagnostics for inflammation related therapeutic areas including oncology, cardiovascular, autoimmune and infectious diseases.

SPECTRUM LASER & TECHNOLOGIES, INC.

Colorado Springs

www.spectrumlaser.com

Provides contract design and manufacturing services for the medical industry.

ST CARDIO TECHNOLOGIES, LLC

Broomfield

www.stcardio.com

Designs, develops, and manufactures electronic medical devices for use in electrophysiology cardiac cath labs. Our Z6 Cardiac Stimulator is our first product and has FDA 510(k) clearance.

ST. RENATUS, LLC

Fort Collins

www.st-rengtus.com

First needle-free, dental anesthetic suitable for use in procedures involving most of the upper teeth. Uses an accurate and sophisticated method to anesthetize the upper teeth without the risk and pain of a needle.

STNDRD INFUSION

Parke

www.stndrdinfusion.com

An early-stage medical device company seeking investors. Will participate in the drug infusion market with a standardized pump capable of performing the product requirements currently met by syringe, cassette, and ambulatory pump configurations. Employs a patented valve system that enables the device to deliver from 1 to 4 drugs sequentially, intermittently, or simultaneously. Employs proprietary drive system with dynamic volumetric delivery range from 0.1 – 1000 ml/ hr @ +/-5% accuracy.

STRIONAIR, INC.

Louisville

www.striongir.com

Manufactures and markets a product that uses disposable media and that can be installed in any air handler or HVAC system.

STROKE RECOVERY SYSTEMS, INC.

Denver

www.strokeaid.com

Develops the AutoMove AM800 that teaches healthy parts of the brain after a stroke to take over lost functionality.

SUMMIT DOPPLER SYSTEMS

Golder

www.summitdoppler.com

Manufactures ultrasound Doppler systems used to detect fetal heartbeat and to monitor peripheral arterial and venous blood flow.

SUNRISE MEDICAL INC

Longmont

www.sunrisemedical.com

Provides home healthcare products including wheelchairs, respiratory, daily living aids, and speech augmentation devices.

SUREFIRE MEDICAL INC.

Boulder

www.surefiremedical.com

The company is developing a novel infusion system for the interventional radiology market.

SUPREME CABLE TECHNOLOGIES, INC.

www.supremecable.com

Manufactures quality custom cable assemblies and wire harnesses.

SWAN VALLEY MEDICAL, INC.

www.swanvalleymedical.com

Swan Valley Medical has developed a line of urology instruments that allow for safer, faster, and more economical treatment of common urological disorders.

THE SPECTRANETICS CORPORATION

www.spectranetics.com

Develops, manufactures and markets single-use medical devices used in minimally invasive surgical procedures within the cardiovascular system along with its CVX-300® excimer laser system.

SYNTHES, INC.

www.synthes.com

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

TRS, INC.

www.oandp.com/products/trs

Develops, manufactures, and markets bodypowered prosthetic devices. Designs and builds technology for persons missing hands.

TAPELESS WOUND CARE PRODUCTS, LLC

www.tapelesswoundcare.com

Manufactures and distributes a system of patented secondary wound dressing retention devices, offering an alternative to traditional secondary wound dressings, for both human and animals.

TARTAN ORTHOPEDICS, LTD

www.tartanortho.com

Manufactures sacro lumbar belts, dorsal lumbar belts (corsets and moldable inserts), Ottenberg style elbow splint, pelvic traction belts, arm slings, cervical collars, acromioclavicular splints, and ankle supports.

TDA RESEARCH, INC.

Nheat Ridge, Golden

www.tda.com

Provides automated catalyst testing equipment to large chemical companies and national laboratories.

TECH-X CORPORATION

www.txcorp.com

Specializes in scientific and engineering software, including visualization and algorithm development.

TENSEGRITY PROSTHETICS, INC.

www.tensegrityprosthetics.com

Develops a prosthetic foot that mimics the functional biomechanics of the human foot in walking.

TELSANO HEALTH

www.telsano.com

Telsano manufactures both the preventive health monitoring devices that gathers and analyzes our personalized data but also provides the innovation to securely display your data and trend charts anywhere anytime.

THE HARLOFF COMPANY

Colorado Springs

www.harloff.com

Manufactures and sells a line of crash carts, medication carts and other specialty carts for hospitals, nursing homes, clinics and surgery centers.

THE SYNAPTIC® CORPORATION

www.synapticusa.com

Develops Synaptic®, a patented pain control technology that works without drugs. Marketed in accordance with FDA regulations for the treatment of acute and chronic pain.

THERATOGS, INC.

Telluride

www.theratogs.com

Produces an orthotic undergarment and strapping system that gives clients with sensorimotor impairment a new modality for improving postural alignment and stability.

TISSUE GENETICS, INC.

www.tissuegenetics.com

Molecular diagnostics company with unique technology for improving the care of patients with genetic diseases using biomarkers to identify patients with hereditary diseases and to determine the course of care.

TMJ IMPLANTS, INC.

www.tmj.com

Designs and manufactures alloplastic implants for the treatment of temporomandibular joint disorders and injuries.

TOLTEC INTERNATIONAL, INC.

www.toltec.biz

Toltec provides medical device engineering services compliant with US FDA and international regulatory standards. We assist medical device companies with the development and maintainence of medical devices in full compliance with the regulations and standards.

TOUCH OF LIFE TECHNOLOGIES, INC. (TOLTECH)

www.toltech.net

Develops procedural simulators in the areas of orthopaedics, gastroenterology, rheumatology, radiology, ophthalmology, and general surgical procedures.

TRANSTRACHEAL SYSTEMS, INC.

www.tto2.com

Develops and manufactures innovative respiratory therapy products that advance medical therapy for persons requiring continuous supplemental oxygen, including the SCOOP transtracheal oxygen therapy system.

TRELLEBORG SEALING SOLUTIONS MOUNTAIN

www.trelleborg.com/en

Supplies high-quality products and solutions for industrial sealing and bearing systems. Activities are focused in many business areas including the food and pharmaceutical industries, as well as medical engineering.

ULTRATHERA TECHNOLOGIES, INC.

Colorado Springs

www.ultrathera.com

Life sciences company dedicated to improving human performance by applying advanced technologies to physiological and neurological needs. Maker of AeroStimTM and PointScribeTM.

VALUE PLASTICS, INC.

Fort Collins

www.valueplastics.com

Designs and manufactures plastic tubing fittings and connectors.

VALVEXCHANGE, INC.

www.valvexchange.com

Develops a bioprosthetic heart valve with a percutaneously-exchangeable leaflet set that provides lifetime service without anticoagulation therapy.

BIOSCIENCE COLORADO 2010/2011

VISTA LIFESCIENCES

Parke

www.vistalifesciences.com

Innovative Healthcare Technology Solutions for Global Healthcare Challenges.

VITRUMED, INC.

Boulder

www.vitrumed.com

Focused on the development of a minimallyinvasive radio frequency (RF) tissue welding technology for pulmonary resections including biopsies, to further advance early detection and treatment of lung cancer.

WALKMED INFUSION, LLC

Englewood

www.walkmed.net

Offers solutions for ambulatory infusion therapy and pain management.

WAVI COMPANY

Boulder

www.ewavi.com

The platform is based on the Electroencephalograph (EEG) that integrates with physician diagnostic tools and a research library. Helps with interpretation and treatment of brain ailments and performance including TBI, PTSD, Alzheimer's Age Management and depression.

WESTMED, INC.

Greenwood Village

www.westmedinc.com

Designs, manufacturers and markets medical devices to anesthesia and respiratory professionals.

WESTONE LABORATORIES

Colorado Springs

www.westone.com

Designs and manufactures custom earmolds for hearing healthcare and other applications.

WI LLC – MEDICAL DEVICE PRODUCT DEVELOPMENT

Englewoo

www.wiinc.net

Designs and engineers medical devices. Including innovative services such as laser welding, assay design, and air bubble management.

XIMEDIX, INC.

Colorado Springs

www.ximedix.com

Manufactures and sells single patient use medical products for the anesthesia, respiratory care, critical care and emergency medicine applications.

YAMATO CORPORATION

Colorado Sprinas

www.yamatocorp.com

Manufactures and sells weighing equipment and systems for medical facilities.

ZETEK, INC.

Auror

www.zetek.net

Manufactures the OvaCue family of ovulation prediction products.

ZYNEX MEDICAL, INC.

Lone Tree

www.zynexmed.com

Offers electrotherapy products, utilizing various methods of non-invasive muscle stimulation and electromyography technology, Interferential Current (IFC) and Transcutaneous Electrical Nerve Stimulation (TENS).

BIOTECHNOLOGY, PHARMA, AND RELATED COMPANIES

ACCERA, INC.

Rroomfiel

www.accerapharma.com

Discovers and develops breakthroughs in treating central nervous system disorders, focusing on serious and difficult-to-diagnose neurodegenerative diseases, products includes therapeutic treatments for Parkinson's disease, Alzheimer's disease and other age-related memory loss disorders.

ACCUTHERA, INC.

Denve

www.accutherainc.com

Develops therapeutics for acute and critical care indications. Initial clinical indication is acute lung injury caused by trauma and/or serious infectious pathogens.

ADVANCED REGENERATIVE THERAPIES (ART)

Fort Collins

www.art4dvm.com

Provides a stem cell isolation and expansion service for veterinary medicine.

AGILENT TECHNOLOGIES

Boulder

www.agilent.com

Agilent Nucleic Acid Solutions develops and manufactures therapeutic oligonucleotide in a multi-product, 33,500 square foot facility.

AGRIPRO COKER

Berthoud

www.agriprowheat.com

Develops and delivers superior wheat seed genetics in North America.

AKTIV-DRY

Boulder

www.aktiv-dry.com

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

ALBANY MOLECULAR RESEARCH, INC (AMRI)

Denve

www.amriglobal.com

Performs services including drug discovery, pharmaceutical development, and manufacturing of active ingredients and pharmaceutical intermediates for many of the world's leading healthcare companies.

ALLERGAN, INC.

Denvei

www.allergan.com

Multi-specialty health care company focused on discovering, developing and commercializing innovative pharmaceuticals, biologics, medical devices and over-the-counter consumer products.

ALLOS THERAPEUTICS, INC.

Westminster

www.allos.com

Develops and commercializes small molecule therapeutics for the treatment of cancer.

ALPHARMA, INC.

Longmont

www.alpharma.com

Alpharma's field-proven feed additives and water solubles help prevent or treat common deficiencies and diseases in cattle, swine, and poultry that may negatively affect their health.

AMERICAN ALLIED BIOCHEMICAL, INC.

Aurora

www.gablabs.com

Specializes in the purification and distribution of restriction endonucleases enzymes.

AMGEN, INC.

Boulder

www.amgen.com

Amgen Discovers, develops, manufactures and markets human therapeutics based on advances in cellular and molecular biology. Amgen's operations in Colorado are dedicated to the mission of assuring patient supply and creating a world-class capability for rapid commercialization, launch and transfer of bulk biopharmaceutical products. In addition to licensed manufacturing of EPOGEN, NPlate, XGEVA, Prolia and clinical therapeutics, Amgen Colorado pursues strategic contract manufacturing opportunities.

AMIDEBIO, LLC

Boulder

www.amidebio.com

Focused on providing peptide and protein research reagents and clinical products for a diverse array of research and commercial targets using proprietary Biopure-ProcessTM technology.

AMPIO PHARMACEUTICALS, INC.

Greenwood Village

ampiopharma.com

Develops innovative proprietary drugs for metabolic disease, eye disease, kidney disease, inflammation, sexual dysfunction and CNS disease.

ANABOLIC LABORATORIES

Colorado Springs

www.anaboliclabs.com

Focused line of nutritional products, with state-of-the-art pharmaceutical manufacturing facilities in California and Colorado.

ANIMAL HEALTH OPTIONS

Golder

www.animalhealthoptions.com

Animal Health Options has been offering high quality antioxidants and nutritional supplements that meet or exceed industry standards and provide a noticeable benefit to dogs, cats and horses.

APOPLOGIC PHARMACEUTICALS, LLC

Aurord

www.apoplogic.com

Focused on the development and commercialization of Breceptin, a unique oncolytic drug for the treatment of a wide range of solid tumors.

AQUATIC BIOSYSTEMS

Fort Collins

www.aquaticbiosystems.com

Full-service organism culturing facility specializing in the production and distribution of freshwater and marine organisms for aquatic toxicology, biomonitoring and other research activities.

ARCA BIOPHARMA, INC.

Broomfield Aurora

www.arcabiopharma.com

Specializes in developing and commercializing genetically-targeted therapies for heart failure and other cardiovascular diseases.

ARIEL PHARMACEUTICALS

Broomfield

www.arielpharma.com

We are a specialty pharmaceuticals company focused on developing therapeutic products that will greatly improve the lives of people with orphan diseases and acute conditions of neurological origin.

ARRAY BIOPHARMA

Boulder, Longmont

www.arraybiopharma.com

Discovers, develops and commercializes targeted small molecule drugs to treat debilitating and life-threatening diseases such as cancer.

ASDX BIOSYSTEMS, INC.

Roulder

www.asdxbio.com

Specializes in the development of immunoassays for environmental agents, foodborne pathogens, infectious diseases and oncology biomarkers using luminescence detection technologies and dedicated luminometer instrument systems.

ASPENBIO PHARMA, INC.

Castle Rock

www.aspenbioinc.com

Primarily focused on advancing towards commercialization, our recently patented blood-based human diagnostic test, AppyScoreTM to aid in the diagnosis of human appendicitis and several novel reproduction drugs for use in high value animals.

ASTELLAS PHARMA US, INC.

Denve

www.astellas.us

Researches and develops pharmaceuticals for select theraputic areas, including Urology, Immunology, Dermatology, Cardiology, and Infectious Diseases.

AUROGEN

Fort Collins

www.aurogen.com

Produces a pharmaceutical treatment for diabetic neuropathy, with a second invention showing that neurotrophic hormones can act across the blood-brain barrier (BBB) to treat various brain disorders.

AVIDITY, LLC

Auror

www.avidity.com

Licenses the patented biotin-accepting peptides (AviTag) technology which exploits the tight interaction of avidin or streptavidin with biotin for immobilizing, purifying and visualizing proteins.

BAROFOLD, INC.

Aurord

www.barofold.com

Discovers, develops and commercializes protein biologics. The pipeline contains therapeutics with an immunology focus, including Multiple Sclerosis, Rheumatoid Arthritis, and Asthma.

BIOAMPS INTERNATIONAL, LLC

Aurord

www.bioamps.com

Focused on the discovery, development and commercialization of proprietary antimicrobial peptide (AMPS) therapeutic solutions for the treatment of systemic infectious diseases, including methicillin-resistant Staphylococcus aureus (MRSA) and other resistant gramnegative and gram positive bacteria.

BIONOVO

Aurora

www.bionovo.com

Discovers and develops drugs for women's health, including menopause, osteoporosis and cancer.

BIORESPONSE, LLC

Boulde

www.bioresponse.com

Researches, develops and commercializes dietary supplements for better absorption and functional foods.

BIOSERVE SPACE TECHNOLOGIES

Boulde

www.colorado.edu/engineering/BioServe

Researches space life science with a wide range of biotechnology applications involving animals, plants and microorganisms.

Specializing in conducting microgravity life science research and designing and developing space flight hardware.

BIOSYNTRX INC.

Colorado Springs

www.biosyntrx.com

Develops nutraceuticals to address the micronutrient needs of the dry eye, cataract, macular degeneration, glaucoma and diabetic retinopathy patient.

BIOVANTAGE RESOURCES, INC.

Golder

www.biovantageresources.com

Delivers algae-based bioremediation solutions for municipal, industrial and agricultural wastewater treatment.

BODYSYNC, INC.

Auroro

www.bodysync.com

Applies evidence-based genetic information to develop personalized products that help individuals achieve their health goals. BodySync, Inc. purchased some of Sciona's assets recently.

BOLDER BIOPATH, INC.

Boulde

www.bolderbiopath.com

Contract pathology and pharmacology research company that specializes in inflammatory disease models with emphasis on models of arthritis.

BOLDER BIOTECHNOLOGY, INC.

Boulde

www.bolderbio.com

Uses advanced protein engineering technologies to create proprietary human protein pharmaceuticals with enhanced therapeutic properties.

BIOSCIENCE COLORADO 2010/2011

BOULDER SCIENTIFIC COMPANY

Mone

www.bouldersci.com

Provides organometallic compounds to the pharmaceutical, polymer, and specialty chemical industries.

BROTICA

Bellvue

www.interval33.com

Produces Interval33, a termite attractant which works by producing the precise level of CO2 that has been shown to attract termites, all natural and animal safe.

CARGILL RESEARCH

Fort Collins

www.cargill.com

Develops, processes and markets science-based, health promoting ingredients for food and dietary supplement industries worldwide.

CARIDIANBCT BIOTECHNOLOGIES, LLC

Lakewoo

www.caridianbct.com

Develops techniques to improve safety of the blood supply by reducing the pathogens found in donated blood.

CATALENT PHARMA SOLUTIONS, INC.

Boulder

www.catalent.com

Designs, manufactures and distributes specialized medical products for fluid management of pleural effusion and ascites.

CAVEO THERAPEUTICS

Aurora

www.caveotherapeutics.com

Discovers and develops innovative biopharmaceuticals to treat and cure hematologic conditions. Provides two research reagents, highly specific monoclonal antibodies to the Mer receptor tyrosine kinase.

CBL BIOPHARMA LLC (CHEMICAL AND BIOPHARMACEUTICAL LABORATORIES)

Boulder

www.cblbiopharma.com

Offering peptide starting materials, peptide intermediates, and industrial and commercial-scale manufacturing of proprietary and generic GMP and non-GMP peptides.

CEDARBURG HAUSER

Denve

www.cedarburghauser.com

Contract development and manufacturing company for active pharmaceutical ingredients (API) and pharmaceutical intermediates that combines the benefits of working with a contract research organization (CRO) and a contract manufacturing organization.

CELL>POINT

Contonnial

www.cellpointweb.com

Develops 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 disease and metabolic diseases.

CERAGENIX PHARMACEUTICALS, INC.

Denve

www.ceragenix.com

Engages in the discovery, development and commercialization of a portfolio of innovative products for dermatolog and infectious disease applications.

CÉVAN INTERNATIONAL, INC.

Longmont

www.cevan.com

Delivers vitamins, minerals and botanical extracts as well as specialty nutriceutical formulations and antioxidants.

CHATA BIOSYSTEMS

Fort Collins

www.chatasolutions.com

Manufactures blended reagents, HPLC mobile phases, standards, buffers and dissolution media.

CHEMIZON INC.

Lonamont

www.chemizon.com

Focused on the discovery and development of targeted therapies to treat patients afflicted with cancer, inflammatory and metabolic diseases.

CINPATHOGEN, INC.

Boulde

www.cinpathogen.com

International research company devoted to improving the understanding and diagnosis of diseases in China.

CLINIMMUNE LABS

Auror

www.clinimmune.com

Provides genetic testing for transplant patients in addition to stem cell processing and umbilical cord blood banking.

CLOVIS ONCOLOGY, INC.

Boulder

www.clovisoncology.com

Clovis Oncology is a biopharmaceutical company focused on acquiring, developing and commercializing innovative anti-cancer agents in the US, Europe and additional international markets.

COBAX BIOPHARMA, INC.

Louisville

www.cobaxbiopharma.com

Cobax is developing a novel bacteriotherapy to prevent recurrence of Clostridium difficile-associated disease (CDAD) by re-establishing the normal gastrointestinal (GI) flora. Recurrent CDAD is a major unmet medical need where bacteriotherapy is proven to be efficacious. We are seeking financing to support the development of a prototype product.

COLORADO BIOLABS, INC.

Frederic

www.proferrin.com

Colorado Biolabs, Inc., the manufacturer of Proferrin® ES and Proferrin® Forte, was founded in 1997 with a plan to develop and market Proferrin – an oral iron supplement made from heme iron polypeptide (HIP). Our proprietary process results in an oral iron product that provides an optimal amount of HIP in a single tablet.

COLORADO GENETICS, INC.

Loveland

www.coloradogenetics.com

Provides livestock embryo-transfer research, artificial insemination, embryo collection, freezing and transfer, and international import and export services.

COLORADO HISTO-PREP (CH-P)

Fort Collins

www.histoprep.com

Produces high quality slides, clinical chemistry and hematology data and fully integrated and detailed seamless pathology reports.

COLORADO SERUM COMPANY

Denver

www.colorado-serum.com

Supplies veterinary biologic vaccines, instruments, laboratory reagents and serums for the veterinary industry.

CRESTONE, INC.

Aurord

www.crestonepharma.com

Drug discovery and development company focused on developing novel treatments for serious bacterial infections. The company currently has two advanced pre-clinical programs that address areas of significant and growing unmet medical need, both with novel mechanism of action agents.

CYTOSKELETON, INC.

)enver

www.cytoskeleton.com

Offers kits for drug screening, signal transduction and cytoskeletal research specializing in the production of purified proteins and easy-to-use kits to study biochemical and cellular processes.

DAVITA

Lakewood

www.davita.com

DaVita provides a complete range of dialysis treatments and support services for patients living with chronic kidney failure.

DISCOVERX

Fremont, CA

www.discoverrx.com

DiscoveRx® is a fast growing innovative company that develops, manufactures, and commercializes reagents, complete assay kits, and turn key solutions for the drug discovery, screening, and life science markets. Our products, biochemical and cell-based assays, enable customers to improve research productivity and effectiveness, thus accelerating the discovery and development of new drugs.

ECKSTEIN DIAGNOSTICS

Fort Collins

www.rmi2.org/57/Eckstein%20Diagnostics

Developing techniques to directly and indirectly detect pathogens from tissues and fluids through various methods.

EFFICAS, INC.

Boulder

www.efficas.com

Develops bioactive products that offer natural relief from asthma and allergies in both humans and animals.

ELISA TECH

Aurora

www.elisatech.com

Provides immunoassays for the measurement of cytokines, growth factors, and lipid inflammatory mediators such as prostaglandins and leukotrienes.

EVOLUTIONARY GENOMICS (EG)

Lafayette

www.evolgen.com

Identifies genes with a high likelihood of commercial value for downstream validation through their proprietary Adapted Traits platform.

FEIGER HEALTH RESEARCH CENTER (FHRC)

www.feigerresearch.com

Private research facility specifically focused on clinical trials for medication to treat depression.

FLASHBACK TECHNOLOGIES

Lonamon

www.flashbacktechnologies.com

Fast, non-invasive detection of acute blood loss volume and prediction of cardiovascular collapse in emergency situations.

FLUTRENDS INTERNATIONAL, LLC

Denver

www.flutrends.com

Biotechnology company that plans to develop and commercialize products for the prevention of influenza.

GEL ANALYTICS, LLC

Golden

www.gel.com

Offers expertise in the field of mass spectrometry and provides chemistry, radiochemistry, radiobioassay and bioanalytical analysis.

GENE CHECK, INC.

Greeley

www.genecheck.com

Gene Check is a diagnostic laboratory specializing in veterinary genetics. In addition, Gene Check maintains a dynamic biotech research program, including rare DNA sequence and SNP detection.

GENENTECH

Denve

www.gene.com

Using human genetic information to discover, develop, manufacture and commercialize medicines to treat patients with serious or life-threatening medical conditions.

GENESIS LABORATORIES, INC.

Wellington

www.genesislabs.com

Provides services to clients in the agrochemical and pharmaceutical industries, rodenticide research and development, as well as invasive species, zoonotic disease, and conservation research.

GENETHERA, INC.

Arvado

www.genethera.net

Develops and markets the latest molecular technologies to eradicate "cross over" diseases such as Johne's Disease, Mad Cow Disease, Chronic Wasting Disease, and E.coli. Develops assay tests and vaccines to radicate the threat to humans of diseases transmitted up the food chain by cattle, elk and deer.

GENETIC TECHNOLOGIES LIMITED

Fort Collins

www.gtglabs.com

Uses the latest technology to identify changes in DNA to either confirm a diagnosis of a specific disorder of which a person displays signs or symptoms, or to identify individuals at risk of developing a disease before any symptoms appear.

GONEX INC.

Fort Collins

www.cedusinc.com

Dedicated to the research, development and commercialization of hormonal based health care strategies for both the human and companion animal markets including technology for sterilizing companion animals with a single injection.

GLAXOSMITHKLINE

Denve

www.gsk.com

Produces medicines that treat six major disease areas – asthma, virus control, infections, mental health, diabetes and digestive conditions as well as vaccines and new treatments for cancer.

GLOBEIMMUNE, INC.

Louisville

www.globeimmune.com

Discovers, develops and manufactures potent, targeted molecular immunotherapies called Tarmogens, targeted antigens that distinguish diseased cells from normal cells, for the treatment of cancer and infectious diseases.

GREFFEX, INC.

Auror

www.greffex.com

Develops and produces new therapeutics for immune suppression in humans to prevent transplant rejection, improve gene therapy and develop novel approaches to the treatment of autoimmune diseases.

HAUSER LABORATORIES, DIVISION OF MICROBAC

www.hauserlabs.com

Provides research, development, and testing to the pharmaceutical, natural products, dietary supplement, and medical device industries.

HEMOGENIX®

Colorado Springs

www.hemogenix.com

Private contract research service and assay development laboratory specializing in developing predictive in vitro assay platforms for primary human and animal target cells and stem cell hemotoxicity testing.

HEPQUANT, LLC

Auror

www.hepquant.com

Designed test parameters using continuous variables that may be correlated to clinical features or may be followed over time to measure disease progression. HepQuant-E is non-invasive, uses stable (not radioactive) isotopes, and relies on natural, well-defined hepatic functions to measure the portal circulation.

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HESKA CORPORATION

Loveland

www.heska.com

Develops advanced diagnostics and specialty products for veterinary practices that focus on companion animals.

HIBERNA CORPORATION

Boulde

www.hibernapharma.com

Pursuing the potential clinical application of hibernation in order to slow metabolism thereby extending survival limits in traumas that reduce oxygen to certain cells, e.g. in the heart and brain.

HOSPIRA, INC.

Boulde

www.hospira.com

Supplies injectably generic and specialty pharmaceuticals. The Colorado site specializes in the supply of active pharmaceutical ingredients for both internal and external markets.

ICVRX

Aurord

www.icvrx.com

Drug reformulations and delivery systems targeting disorders of the central nervous system.

IHCTECH, LLC

Aurord

www.ihctech.net

Offers custom histopathology services, antibodies, probes and biosensors tested in tissue. Specializes in immunohistochemistry and in situ hybridization.

IMUTEK LABORATORIES, INC.

Fort Collins

www.imutek.com

Develops and markets bovine colostrums for the nutrition and health products industry. The first manufacturer to receive an indication for colostrum for the passive transfer of antibodies (immunoglobulins) in dry powder form.

INSTITUTE FOR THERAPEUTIC BIOLOGY

Denve

www.therapeuticbiology.org

Research organization studying the Role of T-Cell maturation in Immunology.

INVIRAGEN, INC.

Fort Collin

www.inviragen.com

Focused on developing life-saving vaccines to protect against emerging infectious diseases worldwide. Inviragen's lead product is a vaccine to protect against dengue fever.

IPDX BIOSCIENCES, INC.

Roulde

www.ipdxbio.com

Develops and markets multiplexed immunoassay and proteomic test systems and applications for the decentralized and point-of-care personalized diagnostic market. Clinical applications will focus on autoimmune, metabolic, oncology and neurodegenerative disorders.

ISOGENIS, INC.

Auroro

www.isogenis.com

Develops therapies for organ transplantation and genetic disease with products based on the veto effect which occurs when specific T-cells programmed to destroy a transplant are all permanently inhibited.

NOSNHOL & NOSNHOL

Danva

www.jnj.com

Manufactures a broad selection of health care products, as well as a provider of related services, for the consumer, pharmaceutical, and medical devices and diagnostics markets.

KEEN INGREDIENTS, INC.

Louisville

www.keeningredients.com

Develops process to de-bitter and stabilize quinoa naturally. Supplying the natural and gluten free industries with high quality Quinoa ingredients.

KEETON INDUSTRIES, INC.

Wellington

www.keetonaqua.com

Researches and develops biological water treatment, aeration, ozone aeration, solids removal, biofiltration and other new technologies.

KIMBALL GENETICS, INC.

Denve

www.kimballgenetics.com

Genetic testing laboratory specializing in DNA analysis for common genetic disorders that are preventable or can be treated.

KROMATID, INC.

Fort Collins

www.kromatid.com

Develops a method and kit using chromatid paints to improve detection of chromosomal inversions. The improvement is important to medical applications such as cancer and birth defects.

- EXPERT TESTING
- INNOVATIVE TECHNOLOGIES
- · SERVICE WITH RESULTS



LABS, INC.

Delivei

www.labs-inc.org

Provides laboratory testing services focused on donor eligibility determination and final product safety; infectious disease, microbiology, histocompatibility and environmental monitoring.

LEGACY BIODESIGN, LLC

Johnstown

www.LegacyBioDesign.com

Conducts peptide and protein formulation and assay development work for biopharma companies. The company also specializes in drug delivery and process development of biotechnology-based products.

LIFE BIOSCIENCE INC.

Longmon

www.lifebioscience.com

Developed a patent pending glass-ceramic material that is photo-structurable. We fabricate 3D glass and ceramic micro-arrays for protein, DNA, glycan, peptides and carbohydrates. We also produce and sell printed microarrays. Out other products revolve around cell based assay and multiplexed micro sphere platforms utilizing our glass-ceramic material.

LIFETIME PHARMACEUTICALS, INC.

Aurora

LifeTime is developing several classes of small molecules that stimulate production and function of WBCs.

LIGHT LABS

Aurora

www.lightlabsusa.com

Light Labs distributes, PCR tubes, TPP tissue culture, pipette tips, microcentrifuge tubes, barrier tips, latex gloves, PCR supplies, and much more.

LOHOCLA RESEARCH CORPORATION

Auroro

www.lohocla.com

Develops diagnostics and therapeutics focused on pain, psychiatric and addictive disorders such as alcoholism, depression, smoking cessation and chronic pain.

MACLEOD PHARMACEUTICALS, INC.

Fort Collins

www.macleodpharma.com

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

MARTEK BIOSCIENCES CORPORATION

Boulder

www.martek.com

Develops, manufactures and sells products from microalgae. Products include nutritional supplements and food ingredients which play a role in promoting mental and cardiovascular health.

MBC PHARMA, INC.

Auroro

www.mbcpharma.com

Biopharmaceutical company focused on discovering and developing drugs for bone diseases such as cancer and osteoporosis.

MEDIMMUNE, LLC

Denve

www.medimmune.com

Strives to provide better medicines to patients, new medical options for physicians, and rewarding careers to employees.

MEDIRAL INTERNATIONAL, INC.

Denve

www.mediral.com

Develops, manufactures and sells homeopathic pharmaceuticals taking into consideration antidotes.

MENOGENIX

Aurora

www.menogenix.com

Clinical stage biotechnology company focused on the development of an approved drug, in a new indication, menopause, and the menopause-like symptoms that occur in certain breast and prostate cancer patients.

MERCK & CO., INC.

Denve

www.merck.com

Merck and Co. produces products that cover a broad range of areas, including heart and respiratory health, infectious diseases, sun care and women's health. And they focus their research on conditions that affect millions of people around the world – diseases like Alzheimer's, diabetes and cancer – while building strengths in new areas like biologics.

MIRAGEN THERAPEUTICS

Roulde

www.miragentherapeutics.com

Improves patients' lives by developing innovative microRNA (miRNA) based therapeutics for the treatment of cardiovascular and muscle disease. miRNAs, are a recently discovered class of small RNAs encoded in the genome, are short, single-stranded RNA molecules.

MITOMICS INC

Aurora

mitomicsinc.com

Mitomics is pioneering the development of molecular tests based on the mitochondrial genome in order to improve clinical insight and therapeutic decisions that affect patients worldwide.

MOLECULAR BIOSCIENCES, INC.

Boulder

www.molbio.com

Manufactures products such as water soluble biotinylation reagents, vitamin derivatives, crosslinking reagents, lipophilic probes, fluorophores, radioiodination reagents, and dendritic cores for preparing oligomers.

MONSANTO COMPANY

Boulder, Denver, Lakewood

www.monsanto.com

Develops technology to produce healthier foods, better animal feeds and more fiber, while reducing agriculture's impact on our environment. Products lines include seeds and traits and agricultural productivity.

MOSAIC BIOSCIENCES

Denve

mosaicbio.com

Commercialization of versatile tissue regeneration technology to create a synthetic extracellular matrix that can be used to expedite the natural healing and tissue regeneration process.

N30 PHARMACEUTICALS, LLC

Boulder

www.n30pharma.com

N30 Pharma's drugs target nitric oxide reductase (NOR), the most important of which is s-nitrosoglutathione reductase (GSNOR) an enzyme of central importance in human health and disease.

NOVARTIS PHARMACEUTICALS CORPORATION

www.novartis.com

Researches and develops products to protect and improve health and well-being with core businesses in pharmaceuticals, vaccines, consumer health, generics, eye care and animal health.

NOVUS BIOLOGICALS, INC.

Littleton

www.novusbio.com

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

NUTRACEUTIX, INC.

Lafayette

www.nutraceutix.net

Offers probiotic organisms (powders) and finished probiotic supplements. Specializes in custom crafting dietary supplements with advanced delivery technologies.

OBERON FMR

Idaho Springs

www.oberonfmr.com

Early stage company with proprietary technology capable of producing a cost-effective, sustainably produced protein meal. Oberon's product serves as a fish meal replacement (FMR) or additive ingredient for animal feeds, primarily those destined for the aquaculture industry.

OMNI BIO PHARMACEUTICAL, INC.

Greenwood Village

www.omnibiopharma.com

Advancing broad-spectrum therapeutics targeting bacterial and viral diseases, biohazards, diabetes and transplant rejection.

ONCOTHERIX

Aurora

www.oncotherix.com

Clinical stage oncology company focused on the development of InCell-RT (Intracellular radiotherapy) for the treatment of locally-advanced cancers (LACs). InCell-RT is a unique, DNA-ligated, nanometer-scale intracellular radiotherapy with the potential to selectively kill cancer cells without causing damage to surrounding healthy tissue and without the development of treatment resistance.

OPX BIOECHNOLOGIES

Boulder

www.opxbiotechnologies.com

Technology platform enables rapid, rational, and robust optimization of microbes and bioprocesses to manufacture bioproducts with equivalent performance and improved sustainability at lower cost compared to petroleum-based alternatives.

OSI PHARMACEUTICALS

Boulde

www.osip.com

Develops and commercializes high-quality and novel pharmaceutical products for patients with cancer, diabetes, and obesity.

PAMBEC LABORATORIES, INC.

Loveland

pambec@aol.com

Researches drug discoveries in the field of AIDS.

PARAGON ANALYTICS

Fort Collins

www.paragonlabs.com

Environmental and radiochemistry testing laboratory offering radiochemistry, mixed waste, explosives, organics, metals, and general chemistry analyses. Division of DataChem Laboratories, Inc.

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PEAK ANALYTICAL, INC.

Golder

www.peaklab.net

Specializes in materials and chemical analysis. Performs a variety of molecular and atomic level spectroscopic techniques to identify failures and defects.

PEPTIVIR

Aurora

site.peptivir.com

PeptiVir is an early stage biopharmaceutical company focused on the development and commercialization of a conformationally-constrained, synthetic peptide-based vaccine platform for the prevention of viral diseases.

PFIZER PHARMACEUTICAL COMPANY

Centennia

www.pfizer.com

Discovers, develops, manufactures, and markets prescription medicines for humans and animals.

PHOSPHOSOLUTIONS, LLC

Auror

www.phosphosolutions.com

Designs and produces phosphoproteins solutions using phosphor-specific antibodies. Phosphoproteins are thought to be critical elements in neurological diseases such as Alzheimer's and in cancer.

PISCES MOLECULAR

Boulder

www.pisces-molecular.com

Applies molecular biology to problems in the aquatic environment.

PYXANT LABS, INC.

Colorado Springs

www.pyxant.com

Specializes in GLP bioanalytical chemistry development support for life sciences clients.

QGENTA

Auror

720-859-4045

Harnessing innovative chemistry and biology in the development of molecular targeted agents for the treatment of cancer.

QUARK PHARMACEUTICALS, INC.

Boulde

www.quarkpharma.com

Discovers and develops siRNA drug candidates for treating Age-related Macular Degeneration and prevention of Acute Renal Failure.

RECKITT BENCKISER (RB)

Fort Collins

www.rb.con

Fastest-growing companies in household, health and personal care products.

REGENERATIVE SCIENCES INC.

Rroomfield

www.regenexx.com

Advances stem cell therapies through development of RegenexxTM, an injection procedure to treat a wide variety of painful conditions.

ROCHE COLORADO

Roulder

www.rochecolorado.com

Develops manufacturing processes for complex pharmaceutical compounds in the Colorado manufacturing facility, a resource for small to large-scale peptide manufacturing.

ROCKY MOUNTAIN BIOSYSTEMS, INC.

Wheatridge

Develops a tissue sealing technology that activates a specially formulated adhesive to bond tissue and achieve a uniform seal in seconds. The systems temporarily or permanently modify tissues for transdermal and deposition drug delivery, and for cosmetic skin resurfacing.

ROCKY MOUNTAIN DIAGNOSTICS, INC.

Colorado Springs

www.rmdiagnostics.com

Provides immunodiagnostic assays and reagents for biogenic amines, research reagents, a CLIA certified reference laboratory and contract manufacturing services.

ROCKY MOUNTAIN INSTRUMENTAL LABORATORIES

Fort Collins

www.rockylab.com

Provides contract chromatographic and mass spectrometric analysis of pharmaceuticals (both traditional drugs and biotechnology products, such as proteins and peptides and oligonucleotides), veterinary and human endocrinology, and forensic toxicology.

ROCKY MOUNTAIN REAGENTS, INC.

www.rmreagents.com

Manufactures stains, culture media and chemistry solutions for the medical industry, as well as titration reagents, indicators, acids, bases, and a variety of chemicals for industrial uses.

RST BIOSCIENCE LLC

Auroro

Develop and commercialize assay system to monitor astronauts for viral infection during space flight.

SAIGENE BIOTECH INC.

Monument

www.saigene.com

Commercializing Sandwich Hybridization Assay technology for the testing of Harmful Algae Blooms in conjunction with the Monterey Bay Aquarium Research Institute and Stanford University.

SANDOZ

Rroomfiel

www.us.sandoz.com

Focuses on pharmaceuticals, consumer health, generics, eye care and animal health. Therapeutic categories inlcude anti-infectives, anti-arthritics, cardiovasculars, gastrointestinal agents & psychotherapeutics.

SHARKLET TECHNOLOGIES, INC.

Centenni

www.sharklet.com

Engineers surface technologies (SharkletTM) that controls the growth of dangerous bacteria.

SIVA THERAPEUTICS INC

Boulde

www.sivatherapeutics.com

Commercialize a proprietary therapeutic device technology, based on gold nanorods, that can be used both independently, and also in conjunction with existing and new cancer drugs.

SOLUTIONS BIOLOGIC

Boulder

Consulting firm providing strategic planning, technical and project management services to biopharmaceutical companies. Support development and commercialization of products from preclinical to marketed stages.

STA LABORATORIES, INC.

Lonamont

www.stalabs.com

Agricultural product testing laboratory that offers seed quality, genomics, plant health and diagnostic services and products.

SUMMIT PLANT LABORATORIES, INC.

Fort Collins

www.plantlabs.com

Applies laboratory plant cloning and greenhouse technologies to produce planting stocks for breeders, greenhouses, and field crop producers.

SUVICA, INC.

Boulder

Suvica will use mutant fruit flies to screen for new cancer treatments.

TAIGA BIOTECHNOLOGIES, INC.

Auror

www.taigabiotech.com

Develops cellular, biologic and small molecule approaches to treat hematological diseases, including cancers, immunodeficiencies and autoimmune conditions.

THERMO FISHER SCIENTIFIC

Lafavette

www.thermofisher.com

Scientific leadership and innovation in RNAi, Gene Expression, qPCR/PCR Detection, and Molecular Biology technologies come together with the Thermo Scientific Dharmacon, Open Biosystems, ABgene, Finnzymes, and Fermentas product lines to provide worldleading solutions for gene analysis.

TOLMAR, INC.

Fort Collins

www.tolmar.com

Develops and manufactures both proprietary and generic pharmaceutical products with specific focus in therapeutic areas of dental, dermatology, and oncology.

UPSHER-SMITH LABORATORIES, INC.

Denve

www.upsher-smith.com

Develops, manufactures and markets a vast range of prescription and over-the-counter products for cardiology, dermatology, women's health and other areas.

US PHARMACAL COMPANY, INC.

Erie

www.uspharmacal.com

Researches, develops and sells topical pharmaceuticals for the geriatric community.

VENTRIA BIOSCIENCE

Fort Collins

www.ventria.com

Develops a protein expression technology platform called ExpressTec with a product pipeline in human nutrition and therapeutics.

VENTRUS BIOSCIENCES, INC.

Greenwood Village

www.ventrusbio.com

A specialty pharmaceutical company focused on the late-stage development and commercialization of gastroenterology products.

VERDANT BIOSCIENCES CORPORATION

Denvei

www.verdantbio.com

Develops plant biochemical regulators that provide superior plant performance and unlock the productive power of plants in markets from floriculture to industrial agriculture.

VETDC

Fort Collins

www.vet-dc.com

VetDC (Veterinary Emerging Technologies Development Corporation) is a for-profit company focused on development of novel devices, diagnostics and therapeutics for emerging veterinary markets. With unmet medical needs in many areas of veterinary medicine, VetDC is positioned to leverage the expertise of the CSU Veterinary Teaching Hospital and the CSU Research Foundation to license existing technologies from the human market and develop the technologies for the animal market, including proof of concept, pre-clinical and clinical work. VetDC will then out-license the validated technologies to large animal health companies for commercialization.

VITRO DIAGNOSTICS, INC.

Golden

www.vitrodiag.com

Develops and commercializes products derived from human cell line research with a focus predominantly in stem cell R&D related to numerous diseases such as heart disease, stroke, Parkinson's and Alzheimer's disease.

VITROLIFE, INC.

Enalewood

www.vitrolife.com

Develops, manufactures and sells products and systems for the preparation, cultivation and storage of human cells, tissue and organs. Product areas include fertility, transplantation and stem cell cultivation.

VRL LABORATORIES

Centennio

www.vrl.net

Laboratory offers full service regulated donor eligibility testing for the human cell and tissue community.

WARREN ANALYTICAL LABORATORY

Greeley

www.warrenlab.com

Specializes in food microbiology, molecular biology, food chemistry, residue chemistry and nutritional labeling.

WESTERN STATES BIOPHARMACEUTICALS, INC.

Auroro

www.westernstatesbiopharm.com

Novel anti-inflammatory therapeutics for autoimmune diseases.

WHAT'S GOING ROUND, LLC

Auror

www.WhatsGoingRound.com

Healthcare IT company whose goal is to become the place where you go first when you're thinking about your health.

WILDLIFE PHARMACEUTICALS, INC.

Fort Collins

www.wildpharm.com

Providing pharmaceuticals for the safe and humane care of non-domestic and exotic wildlife species.

YEWSAVIN, INC.

Fort Collins

www.ajorganica.com

Develops chemical and biochemical technologies. Successfully finished multistep syntheses using Bromination, Grignard reaction, Suzuki coupling, Amidation, and Esterification reactions.

ZEOPONIX, INC.

Boulder

www.zeoponix.com

Develops NASA originated technology to produce a soil amendment/fertilizer zeoponic material that utilizes nutrients more efficiently and reduces nutrient leaching into the environment.

ZOOPHARM, INC.

Fort Collins

www.zoopharm.net

Specialized veterinary compounding pharmacy. We custom compound analgesics, sedatives, their antagonists, and other unique drugs for use in veterinary medicine.

BIOFUELS AND RELATED COMPANIES

A1 ORGANICS

Eaton

www.alorganics.com

Composts and recycles organic by-products from various waste: yard trimmings, wood, biocides, agricultural by-products, manure, brewery by-products, construction debris and food residuals.

A2BE CARBON CAPTURE, LLC (ALGAE@WORK)

Boulder

www.algaeatwork.com

developing bio-secure, scalable, climate adaptive, and highly cost effective technology for producing valuable fuel and food from CO2 using algal photosynthesis and bio-harvesting.

AEROPHASE, INC.

Longmont

www.aerophase.com

Research and Development of technologies that reduce environmental impact, and efficient extraction system for biodiesel

BBI INTERNATIONAL

Lakewood

www.bbibiofuels.com

Offers consulting services, including feasibility studies, market analyses, site & resource assessments, economic impact studies, business plans, industry benchmarking and industry surveys to the biofuels sector.

BIOENERGY OF COLORADO, LLC

Denve

www.bioenergycolorado.com

Produces biofuel alternatives utilizing Soy Biodiesel from virgin soy oil. Current product line includes Biodiesel (Gold and Green™) and BioHeat.

BIOSCIENCE COLORADO 2010/2011

BIOFUEL ENERGY CORPORATION

Denve

www.bfenergy.com

Constructs large scale ethanol production facilities in cooperation with Cargill and owns and operates two of the largest dry mill ethanol facilities in the United States.

BIOLYNCEUS BIOLOGICAL SOLUTIONS

Estes Park

www.biolynceusturf.com

Working to help local governments, businesses and citizens to use environmentally safe alternatives to harsh toxic chemicals. Our Biological Solutions renew the natural ecological system with biologically sound products that do not contaminate soil or water resources.

BIOMASS ENERGY FOUNDATION (BEF)

Franktow

www.woodgas.com

Researches alternative fuels such as dried fruit pits, vegetable oil, wood, coffee grounds and the methods to produce biofuels.

BLUE SUN BIODIESEL

Golder

www.gobluesun.com

Distributes premium agricultural and renewable fuel products. Blue Sun Fusion™ a blend of premium Blue Sun Biodiesel (20%) with petroleum diesel fuel (80%), along with proprietary additive package specifically tailored for regional climates and seasons, is available at numerous retail pumps throughout Colorado, Wyoming, New Mexico, Nebraska, Utah, and Idaho.

COLORADO CENTER FOR BIOREFINING AND BIOFUELS (C2B2)

Boulder

www.c2b2web.org

A cooperative research and educational center devoted to the conversion of biomass to fuels and other products. Works to establish ground-breaking research and educational programs for the advancement of renewable energy technologies.

CH2M HILL

www.ch2m.com

One of the world's leading firms in the design of biochemical and biofuels facilities. Provides engineering, procurement, construction, management, consulting and sustaining services for biochemicals, ethanol, cellulosic ethanol, and biodiesel plants.

CIRIS ENERGY, INC.

Centennial

www.cirisenergy.com

Formed to develop, commercialize and produce clean energy from abundant, low-value carbon sources, on a large scale. We are practical technology implementers, and primarily an energy production company.

COMMUNITY POWER CORPORATION

Littleton

www.gocpc.com

Develops, commercializes and markets modular biopower systems to meet the needs of distributed energy consumers in both developing and developed countries.

DELTA DYNAMICS, LLC

Denver

www.deltadynamicsenergy.com

Constructs and installs small-scale biomass plants.

FRONT RANGE ENERGY, LLC

Windsor

www.frontrangeenergy.com

Ethanol producer since 2006. Will process approx. 40 million gallons of ethanol and 396,000 tons of wet distillers' grain annually.

GEOSYNFUELS, LLC

Golden

www.geosynfuels.com

Developsd a low-cost method to convert cellulosic biomass into fuel. The technology uses biological mechanisms set in a solid-state fermenter ("SSF") to convert the biomass into ethanol and/or methane.

GEVO, INC.

www.gevo.com

Develops advanced biofuels like isobutanol, butanol that will provide a sustainable path to the replacement of petrochemicals like gasoline, diesel and jet fuel.

H2OPE BIOFUELS, INC.

Auror

www.h2opebiofuels.com

H2OPE Biofuels will provide a clean alternative source of fuel for the masses, available globally using an affordable, readily available photosynthetic process. The product is a green, alternative source of fuel, utilizing algae to produce hydrogen.

INTERMOUNTAIN CHP CENTER

Boulde

www.intermountainCHP.org

Formed by the U.S. Department of Energy to increase adoption of Combined heat and power (CHP) in the states of Arizona, Colorado, New Mexico, Utah, and Wyoming.

LUCA TECHNOLOGIES, INC.

Golden

www.lucatechnologies.com

Researches the ability of naturally occurring microorganisms to convert under-utilized domestic oil, organic-rich shale and coal resources to clean, renewable energy.

MERRICK® & COMPANY

Aurora, Colorado Springs

www.merrick.com

Provides engineering, construction management, and development services for biomass conversion-to-ethanol projects, also providing consulting services to oil and gas clients and local regulated utilities.

NOVO ENERGY LLC

Fort Collins

www.novoenergyllc.com

Colorado-based renewable energy company that provides state-of-the-art technology, equipment, and project support services for the renewable energy and solid waste disposal industries.

NUEMANN SYSTEMS GROUP

Colorado Springs

www.neumannsystemsgroup.com

Research, technology and product development focused on product prototyping of gas-liquid contactor systems for chemical processing and emissions control.

POLYNEW, INC.

Golde

www.polynewinc.com

Developed a new class of PLA bioplastics which it terms "ecobionanocomposites." These are nanocomposites from 100% renewable resources that could be used in a wide variety of applications including medical device applications.

POWER ECALENE FUELS, INC.

Arvado

powerecalene.com

Exclusive licensor of a patented nano-catalyst technology that efficiently converts "syngas" or "producer gas" into a premium mixed alcohol transportation fuel called EcaleneTM. EcaleneTM is usable as a stand-alone fuel for cars, trucks, buses, jet aircraft and boats.

PUREVISION TECHNOLOGY, INC.

Fort Lupton

www.purevisiontechnology.com

Develops a carbon-neutral biomass fractionation technology that converts cellulosic biomass into sugars, energy and fiber that are bio-based raw materials to make many industrial and consumer products.

RANGE FUELS

Broomfield

www.rangefuels.com

Converts biomass that cannot be used for food into low carbon biofuels and clean renewable energy using emerging clean energy technologies. Biomass includes all plant and plant-derived material, such as wood, switch grass, corn stover, and miscanthus grass — making it a renewable energy resource that produces no net greenhouse gases.

SAN JUAN BIOENERGY

Dove Creek

www.sanjuanbio.com

Pressed oil seed facility in the heart of a developing oil seed region.

SOLIX BIOFUELS, INC.

Fort Collins

www.solixbiofuels.com

Develops massively scaleable photo-bioreactors for the production of biodiesel and other valuable bio-commodities from algae oil.

STERLING ETHANOL, LLC

Sterling

www.sterlingethanol.com

Produces 42 million gallons of ethanol annually, using the distiller's grain produced as a coproduct of ethanol to the areas cattle feeders for its high protein levels.

SUNDROP FUELS, INC.

Louisville

www.sundropfuels.com

A solar gasification-based renewable energy company.

ZEACHEM

Lakewood

www.zeachem.com

Developed a cellulose-based biorefinery platform capable of producing third-generation ethanol fuel and intermediate chemicals. Our indirect approach leapfrogs the yield and carbon dioxide (CO2) problems associated with traditional and cellulosic based ethanol processes.

RESEARCH AND EDUCATION

ADVANCED DIAGNOSTIC LABORATORIES (ADX) AT NATIONAL JEWISH MEDICAL AND RESEARCH CENTER

Denve

www.njlabs.org

Adx offers cost-effective and timely preclinical, clinical and non-clinical trials and helps customers select, customize, perform, interpret and report clinical tests. Their reference laboratory provides solutions for the rapid development of custom assays, consultation, clinical strategy assessments and innovation within the areas of the National Jewish expertise. ADx operates under GLP guidelines when applicable and the laboratories are fully accredited by the College of American Pathologists (CAP) and the Clinical Laboratory Improvement Act (CLIA), as well as others.

AIMS COMMUNITY COLLEGE

Greeley, Loveland, Fort Lupton

www.aims.edu

One of the largest and most comprehensive two-year colleges in Colorado, offering more than 160 degree and certificate programs. 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.

BIOLOGICAL SCIENCES CURRICULUM STUDY (BSCS) Colorado Springs

www.bscs.org

A nonprofit corporation that endeavors to improve all students' understanding of science and technology by developing exemplary curricular materials, supporting their widespread and effective use, providing professional development, and conducting research and evaluation studies.

BONFILS BLOOD CENTER

Denve

www.bonfils.org

One of the nation's leading community blood centers through their commitment to quality service, innovation, research and technology. They 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 endure the best possible patient outcomes.

CENTERS FOR DISEASE CONTROL AND PREVENTION/DIVISION OF VECTOR-BORNE INFECTIOUS DISEASE

Fort Collins

www.cdc.gov/ncidod/dvbid

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. It 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.

COLORADO CENTER FOR DRUG DISCOVERY (C2D2)

Fort Collins

c2d2.org

A non-profit organization funded through the State of Colorado. The organization promotes drug discovery research with Colorado through a combination of funding, medicinal chemistry and modeling expertise.

CPC CLINICAL RESEARCH

Denve

www.cpcmed.org

Revolutionizing clinical research and creating innovative preventative programs that will change behavior to improve your health.

COLORADO SCHOOL OF MINES

Golder

www.mines.edu

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. These programs, with strong interdisciplinary linkages across the campus, have led to the integration of bioscience and biotechnology into educational and scholarly activities. CSM has created a Bioengineering and Life Science Program that draws upon faculty and students from all of the academic units.

COLORADO STATE UNIVERSITY

Fort Collins, Pueblo

www.colostate.edu

As one of the nation's leading research universities, Colorado State University is committed to realizing its vision as a 21st century land-grant university. CSU leads the world in such areas as infectious disease research, atmospheric science and environmental science. Its faculty members are tackling such issues as the reemergence of tuberculosis, the brown cloud of air pollution in Asian cities, severe weather forecasting, nutrition and wellness, and bioterrorism. In addition to its excellent programs in those areas, CSU offers among the very best professional programs in the United States in areas like veterinary medicine, occupational therapy, journalism, agriculture and construction management. Its programs in the arts, humanities and social sciences are also outstanding.

CSU RESEARCH INNOVATION CENTER

Fort Collins

csuric.org

The Research Innovation Center (RIC) serves as a vehicle to perform collaborative translational-stage research with CSU's life sciences community of researchers, giving it the promise to become the birthplace of medical breakthroughs.

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COMMUNITY COLLEGE OF AURORA (CCA)

Auroro

www.ccaurora.edu

CCA provides lifelong educational opportunities, prepares the current and future workforce, and promotes excellence in teaching, learning and service. CCA offers a unique Biotechnology Technician Research and Development Certificate designed to train highly skilled lab personnel for the biotech industry.

COLORADO INITIATIVE IN MOLECULAR BIOTECHNOLOGY (CIMB)

Boulde

cimb.colorado.edu

State-of-the art research and education facility that links the basic sciences, engineering, clinical practice, and industry at the University of Colorado's Boulder campus.

COLORADO INSTITUTE FOR DRUG, DEVICE AND DIAGNOSTIC DEVELOPMENT (CID4)

Auror

www.cid4.com

CID4 provides management expertise to efficiently transform emerging life science technologies into commercial successes. We do this by identifying and funding potential opportunities, and by utilizing an advanced leadership team to ensure speed to market, putting new products and services to work where they are needed.

DENVER MUSEUM OF NATURE AND SCIENCE

Denve

www.dmns.org

The Denver Museum of Nature & Science is the Rocky Mountain region's leading resource for informal science education. A variety of exhibitions, programs, and activities help Museum visitors experience the natural wonders of Colorado, Earth, and the universe.

DSST PUBLIC SCHOOLS (DENVER SCHOOL OF SCIENCE AND TECHNOLOGY)

Denver

www.dsstpublicschools.org

DSST Public Schools is dedicated to providing a diverse student body with an outstanding liberal arts high school education with a science and technology focus. By creating a powerful learning community centered on core values and a shared commitment to academic excellence, DSST will increase the number of underrepresented students (women, minorities and economically disadvantaged) who attain college science and liberal arts degrees. DSST Public Schools operates three schools on two campuses, Stapleton (grades 6-12) and Green Valley Ranch (6th). A third DSST campus, Cole Arts and Sciences, will open with a 6th grade in the fall of 2011. DSST: Stapleton is widely considered to be one of the leading open enrollment STEM schools (Science, Technology, Engineering and Mathematics) in the U.S. and has become a destination for educators

nationwide. DSST: Stapleton has consistently been the highest performing secondary school in DPS, based on growth and absolute performance. DSST: Stapleton's first four graduating classes earned 100% acceptances into four-year colleges. Fifty percent of DSST's 2010 graduating class is first generation college-bound.

FRONT RANGE COMMUNITY COLLEGE

Brighton, Fort Collins, Longmont and Westminster

www.frontrange.edu

Front Range Community College, Colorado's largest community college, provides instruction, in both general education and occupational areas, which may lead to a certificate, an associate degree, or transfer to a four-year institution. The college also provides college preparatory education, non-credit instruction for personal and professional development, and workplace skill development. With campuses located in Fort Collins, Longmont and Westminster, the college is proud of its many partnerships to provide quality programs that are responsive to the needs of its local communities.

KEYSTONE SYMPOSIA ON MOLECULAR AND CELLULAR BIOLOGY

Silverthorne

www.keystonesymposia.org

A non-profit organization that serves as a catalyst for the advancement of biomedical and life sciences by connecting scientists within and across disciplines at conferences and workshops held at venues that create an environment conducive to information exchange, generation of new ideas, and acceleration of applications that benefit society.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

Roulder

www.nist.gov

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 HEALTH

Denver

www.njc.org

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 investors.

NATIONAL RENEWABLE ENERGY LABORATORY

www.nrel.gov

The nation's primary laboratory for renewable energy and energy efficiency research and development (R&D). NREL's mission and strategy are focused on advancing the U.S. Department of Energy's and our nation's energy goals. NREL's R&D areas of expertise are: renewable electricity (solar, wind, biomass, geothermal), renewable fuels (biomass, hydrogen), integrated energy system engineering and testing (buildings, electric systems and transportation infrastructures), and strategic development and analysis (economic, financial, and market analysis, planning and portfolio prioritization).

POUDRE VALLEY HEALTH SYSTEM Loveland, Fort Collins

www.pvhs.org

Poudre Valley Health System operates as a private, not-for-profit organization providing a regional network of health care services for the people of northern Colorado, western Nebraska, and southern Wyoming. The system is comprised of the Poudre Valley Hospital, the Medical Center of the Rockies, as well as several community clinics that provide primary and specialized medical services. Poudre Valley Hospital was named one of the nation's top 100 hospitals for the fifth year, has been considered a Magnet Nursing Practice since 2000 and has been presented with the American Nurses Association's highest award for sustained overall excellence in nursing quality.

REGIS UNIVERSITY

Denve

www.regis.edu

The School of Pharmacy aspires to be the foremost school of pharmacy in the United States where students are nurtured and developed to become leaders in pharmacy practice, research, education, and public service. As a result, students graduate as professionals who are knowledgeable, skillful, and principled, and who are able to make a positive impact on the dramatically changing role of pharmacists in our transforming society. They are educated to be committed to excellence in healthcare, evidenced not only by their knowledge and abilities, but also by their quality of care, integrity, compassion, respect, advocacy, initiative, service and leadership. To achieve these goals, faculty members are dedicated to providing innovative practice models, exploring novel applications of basic and clinical research, and illustrating the value of lifelong learning.

ROCKY MOUNTAIN INNOSPHERE

Fort Collins

www.rmi2.org

At Rocky Mountain Innosphere (RMI), we are helping new clean energy, technology and scientific startup companies turn their great ideas into great businesses. These businesses, in turn, create high wage job opportunities for the community and fuel the growth of the industries of the future.

ROCKY VISTA UNIVERSITY COLLEGE OF OSTEO-PATHIC MEDICINE (RVUCOM)

Donvo

Rocky Vista University College of Osteopathic Medicine (RVUCOM) is one of the newest of the 28 colleges of osteopathic medicine currently established or in development in the United States. With five departments – biomedical sciences, structural medicine, primary care, Osteopathic Principles and Practices, Specialty Medicine and Medical Informatics the faculty and staff of RVUCOM are committed to osteopathic philosophy and heritage, and to advancing the science and the art of the practice of osteopathic medicine.

ROSE MEDICAL CENTER

Danvar

www.rosemed.com

Has earned a reputation as Denver's "Baby Hospital" while becoming a leader in comprehensive women's services, internal medicine, endoscopy, heart and vascular care, orthopedics and total joint replacement, bariatric surgery, sports medicine and aesthetic surgery.

SCIENTIFIC EDUCATION & RESEARCH INSTITUTE (SERI)

Thornton

www.theseri.com

SERI is a unique institute, which combines an orthopedic clinic, specializing in spine surgery, with a clinical research unit and and education and training program. Our facility has available to rent an amphitheater with full AV setup for presentations, as well as a bioskills lab with cadaveric dissection capabilities. We host a variety of educational programs including summer science camps. Additionally we host a large number of training programs sponsored by surgical and medical companies.

SWEDISH MEDICAL CENTER

Englewood

www.swedishhospital.com

Level I Trauma Čenter, serves as the region's referral center for neurotrauma and is a recognized leader in the treatment of stroke. An acute care hospital with 368 licensed beds.

UNITED STATES GEOLOGICAL SURVEY (USGS) -CENTER FOR BIOLOGICAL INFORMATICS

Denve

biology.usgs.gov/cbi

The Center for Biological Informatics, at the Denver Federal Center, operates the national Bio-

logical Information Infrastructure (NBII). This is the first comprehensive electronic gateway dedicated exclusively to biological science data and information from sources throughout the world.

HELP GROW COMPANIES FROM UNIVERSITY RESEARCH

The University of Colorado Technology Transfer Office is seeking Front Range businesses and professionals to volunteer as advisors for new companies.

Contact: Lindsay Lennox 303-735-5518

lindsay.lennox@cu.edu



University of Colorado TECHNOLOGY TRANSFER OFFICE

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. Research and teaching hospitals affiliated with the University of Colorado include: The University of Colorado Hospital, The Children's Hospital, National Jewish Medical and Research Center, Denver Health and the VA Medical Center.

UNIVERSITY OF DENVER

www.du.edu

Strives to provide the most modern educational and research facilities in the life sciences. Their 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 a 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.

WORK, EDUCATION AND LIFELONG LEARNING SIMULATION (WELLS) CENTER

Aurora

www.wellssimulationcenter.org

For the first time in Colorado, one facility offers a complete array of state-of-the-art patient simulation tools for building clinical knowledge. Even more exciting, high-speed datacasting technology makes this unique resource available remotely. Students, faculty and practicing nurses and physicians from throughout Colorado can enhance their diagnostic and clinical skills at the WELLS Center either on-site or on-line. Housed in the new Bioscience East building at Fitzsimons, the WELLS Center represents a unique collaboration among educators, providers and policymakers.

FOUNDATIONS

BOETTCHER FOUNDATION

Denvei

www.boettcherfoundation.com

Founded by the Boettcher Family in 1937 to effectively assist, encourage and promote quality of life for the citizens of Colorado, the Boettcher Foundation invests in education, community services, health, and arts & culture through merit awards, scholarships and capital grants.

COLORADO STATE UNIVERSITY RESEARCH FOUNDATION (CSURF)

Fort Collins

www.csurf.org

CSURF is a private, not-for-profit Colorado Corporation established (in 1941) to aid and assist the University campuses (Colorado State University and recently Colorado State University Pueblo) governed by the Board of Governors of the Colorado State University System in their research and educational efforts. Functions include patent and licensing management; equipment leasing and municipal lease administration; financing of equipment, real estate and buildings through mortgage debt obligation(s); and land acquisition, development and management.

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THE CHILDREN'S HOSPITAL FOUNDATION

Aurora

www.imaginethemiracles.org

The Children's Hospital Foundation is the fundraising arm for TCH programs and operations. Since 1978, the Foundation has raised more than \$200 million for the hospital and today is in the middle of a fudnraising campaign to financially support the building of a new hospital at Fitzsimons, as well as Children's programs and services.

POUDRE VALLEY HEALTH SYSTEM FOUNDATION Loveland, Fort Collins

www.foundation.pvhs.org

The Poudre Valley Health System Foundation philanthropically supports and promotes the health interests of Poudre Valley Hospital, the Medical Center of the Rockies and the community by raising and distributing funds for programs that target prevention, education, research, health promotion, wellness and disease management.

UNIVERSITY OF COLORADO FOUNDATION

Boulder

www.cufund.org

The University of Colorado Foundation is a privately governed nonprofit corporation whose mission is to support the University of Colorado. As a valued and trusted partner, the University of Colorado Foundation generates the private support needed in perpetuity for CU to achieve international preeminence as a public research university. Our donors enable CU to reach its full potential to transform lives worldwide through education, research, clinical care and community service.

SERVICE PROVIDERS

ARCHITECTURE

HOK

www.hok.com

IRON HORSE ARCHITECTS, INC.

www.iron-horse-architects.com

LEO A. DALY

www.leoadaly.com

ROSENMAN ASSOCIATES ARCHITECTS

www.rosenman-arch.com

CONSTRUCTION AND FACILITIES

BIOFACILITIES PLANNING & MANAGEMENT ASSOCIATES

www.biofacman.com

CH2M HILL www.ch2m.com

CRB ENGINEERS AND BUILDERS

www.crbusg.com

FACILITY PLANNING ARTS

www.planningartsinc.com

THE NEENAN COMPANY LLP

www.neenan.com

THE WHITING-TURNER CONTRACTING CO.

www.whiting-turner.com

CONSULTING - GENERAL BUSINESS

BIOMEDICAL COMMUNICATION & CONSULTING

barbzim1@mindspring.com

FITZSIMONS BIOBUSINESS PARTNERS (FBBP)

www.fbbp.org

LCC CONSULTING, LLC

www.lccconsulting.net

NEIL BURRIS & ASSOCIATES

neil@sssnpartners.com

NJEVITY, INC.

www.njevity.com

PEAK TO PEAK PHARMACEUTICAL ASSOCIATES

peaktopeakpharma.com



The one-stop shop for bioscience consulting . . . and more!

Connecting you to the expertise and experience your company needs today.

Bob Eaton, President & CEO bob@yourbioteam.com 480-588-8908

YOUR BIO TEAM

www.yourbioteam.com

CONSULTING - INTERNATIONAL

IMAR LIFE SCIENCES

imarlsci.com

INTERNATIONAL BUSINESS SERVICES OF COLORADO (IBSC)

paul_parungo1@yahoo.com

CONSULTING - REGULATORY, COMMERCIALIZATION AND DEVELOPMENT

AERIE BIOCONSULTING, LLC

aeriebioconsulting.net

BIOLOGICS CONSULTING GROUP, INC.

www.biologicsconsulting.com

EMERSON CONSULTANTS, INC.

www.emersonconsultants.com

EVERGREEN RESEARCH, INC.

www.evergreenresearch.com

EVOLVE BIOSCIENCES LLC

www.evolvebiosciences.com

GROW EMERGING COMPANIES LLC

www.grow-ec.com

HEALTH PERLS, LTD.

INSPIRE LLC

www.out-innovate.com

ORRA GROUP, LLC

www.orragroup.com

REGLERA, LLC

www.reglera.com

REGULUS PHARMACEUTICAL CONSULTING, INC.

www.reguluspharma.com

CONTRACT RESEARCH ORGANIZATIONS

CBR INTERNATIONAL CORPORATION

www.cbrintl.com

HIGH QUALITY RESEARCH, LLC (HQR)

www.hqrllc.com

LABS, INC.

www.labs-inc.org

MPI RESEARCH

www.mpiresearch.com

NEXTGEN PHARMA TECHNOLOGIES, INC.

www.nextgenpharma.com

OMNIAVINCIT, LLC

www.omniavincit.com

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platobiopharma.com

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