



2008 ANNUAL REPORT

From the Chairman



Funding from the St. Louis Arch Angels network has positively impacted more than a dozen start-up companies since our launch in January 2005. Through the end of 2008, investments by the Arch Angels network have reached almost \$20 million. With the release of our 2008 Annual Report, we appreciate the opportunity to provide our key constituents with a summary of the companies funded.

Now in our fifth year, we continue to be impressed by the innovative and entrepreneurial talent that exists in the region. We are invested in a diverse group of companies, ranging from developers of revolutionary drugs and advanced medical devices to technology-driven swimwear designers and producers of educational children's toys, and many others in between. The St. Louis Arch Angels are pleased to report that 15 of the 16 active companies funded through the end of last year are headquartered in the St. Louis area.

We are proud of the role we play in cultivating an environment where entrepreneurs can grow and thrive. It is essential to the future of the St. Louis economy that we continue to have investors, academic institutions, and state and local governments focused on building a culture in which young companies can succeed.

The St. Louis Arch Angels network hopes you enjoy this update about the progress of our organization and the companies in which we have invested. In addition to attracting and retaining bright minds, we recognize that today's small businesses collectively represent great potential for job growth in a struggling economy, and we are pleased to support them.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Bickel". The signature is fluid and cursive.

Gilbert Bickel
Chairman

MISSION OF THE ST. LOUIS ARCH ANGELS

OUR MISSION IS TO PROVIDE OPPORTUNITIES FOR OUR MEMBERS TO OBTAIN OUTSTANDING FINANCIAL RETURNS BY INVESTING IN EARLY-STAGE COMPANIES WITH HIGH GROWTH POTENTIAL IN THE ST. LOUIS REGION AND HELPING THEM TO ACHIEVE MARKET LEADERSHIP.



ABOUT ANGEL INVESTING

THE ST. LOUIS ARCH ANGELS BENEFIT ENTREPRENEURS THROUGH EXPOSURE TO A LARGE SET OF POTENTIAL INVESTORS AND A STRUCTURED PROCESS THAT FACILITATES A RELATIVELY QUICK INVESTMENT DECISION. ANGEL INVESTING REPRESENTS A SIGNIFICANTLY LARGER AND GROWING PORTION OF EARLY STAGE CAPITAL AVAILABLE TO STARTUP COMPANIES.

ABOUT THE ST. LOUIS ARCH ANGELS

Established in January 2005, the St. Louis Arch Angels is an independent, not-for-profit 501c(6) corporation. The network was organized with the support of the St. Louis Regional Chamber and Growth Association and the Nidus Center for Scientific Enterprise. The Arch Angels are a part of the region's seed to later stage equity capital continuum and target an investment range of \$250,000 to \$1,000,000, which is generally underserved by institutional venture capital firms. Because of this, our network is an important addition to the region's capacity to finance innovation emerging from entrepreneurs, universities and technology incubators.

Our members are all accredited investors from the St. Louis region. They have significant experience in a variety of fields as entrepreneurs, CEOs, venture capitalists and business leaders who have founded, funded and built companies. We mentor and coach the entrepreneurs we invest in, serving on their boards, providing contacts and assisting them with team building, strategic planning and fundraising.

Members do not invest in a pooled fund, but rather commit to invest a minimum of \$50,000 a year directly in startup companies with other members of the network.

Members always invest under the same terms and conditions. The network's activities are guided by its bylaws and rules of membership.

A network of private investors, the St. Louis Arch Angels is governed by a board of directors composed of the following officers:

Chairman: Gilbert Bickel

President: Dr. Robert J. Calcaterra

Secretary: Thomas M. Walsh

Treasurer: William C. Rusnack

LIST OF COMPANIES FUNDED

AKERMIN

Akermin is developing and commercializing biocatalytic systems based on proprietary enzyme immobilization technology. Two applications are in focus. First, biofuels cells for low power/long runtime applications, such as wireless sensors, are in the prototype stage and being readied for commercialization in 2010. Biofuel cells for low power sensors have 4X the runtime of the competing products at the same price point. Secondly, and earlier in the development cycle, are systems for enzyme-catalyzed CO₂ capture and removal from industrial gas streams that will reduce cost by 20-30 percent compared to today's best available technology. Accelerated CO₂ capture systems with 10 percent lower installed capital cost can reduce operating energy cost requirements by 50 percent or more.



During 2008, Akermin successfully developed a supply of prototype biofuel cells under paid contracts for two development stage partners. Akermin also secured a research grant from the US Army that has been extended through 2009. During the year, Akermin will further develop biofuel cell prototypes for wireless sensor customers and initiate coin cell prototype development. The CO₂ capture, area partners and DOE funding grants will be secured to advance the development of enzyme immobilization, testing and system development. www.akermin.com

Arch Angels Investment: \$2,445,000

APISTRY

Appistry simplifies cloud computing for the enterprise, opening the door to a more agile and scalable IT environment. In 2008, the company grew annual revenues by over 200 percent based on increased demand by organizations seeking to harness the power of cloud computing to achieve high levels of application scalability and agility while significantly reducing development and operating costs. Appistry added an array of new customers including General Electric, Iris Wireless, Lockheed Martin, Northrop Grumman Mission Systems, and Open Span, among others.



Appistry will continue to grow its government business in 2009 and broaden adoption of the Appistry CloudIQ Platform in the commercial segment. Appistry will release a new CloudIQ Platform family of products in 2009 to address the complex challenges of delivering and managing a wide variety of applications and services for both public and private clouds. www.appistry.com

Arch Angels Investment: \$1,950,000

CERVIMARK

Cervimark was funded by the St. Louis Arch Angels in 2008 to develop a laboratory test to predict the risk of premature birth in pregnant women. Spontaneous premature birth affects six to eight percent of pregnancies, and its medical costs are estimated at \$26 billion annually.



Cervimark's test could help reduce the rate of premature birth. The cost saving is the premise for healthcare payors to pay for the cost of the test. Potential annual revenue with universal screening could be \$800 million in the American market alone.

Cervimark received an NIH grant in 2007, and in 2009 is applying for an SBIR Phase II grant and preparing an FDA PMA application. Cervimark is running clinical trials at Missouri Baptist Hospital, Duke University and Washington University.

Arch Angels Funding: \$378,000

ST. LOUIS AREA COMPANIES FUNDED BY THE ARCH ANGELS COLLECTIVELY:

- EMPLOY MORE THAN 150 INDIVIDUALS
- PROVIDE ANNUAL SALARIES/BENEFITS WELL IN EXCESS OF \$10 MILLION
- SPEND MORE THAN \$3.5 MILLION ANNUALLY ON PROFESSIONAL SERVICES

CLEARENT

Clearent is using state-of-the-art technology to revolutionize the payments processing industry. Using proprietary software infrastructure, exclusively licensed for payments processing, Clearent is able to achieve a highly reliable and highly scalable system built on commodity hardware, yielding lower capital, development and operations costs, while increasing reliability and security. Clearent couples this low cost core with unique web and business intelligence capabilities to deliver superior value.

Clearent sells its services through banks and independent sales organizations and recently received certifications from MasterCard, Visa and Discover. www.clearent.com



Arch Angels Investment: \$700,000

COGNO

Cogno is a multimedia children's brand that inspires kids ages 7-13 to think critically and imaginatively in science and math. Cogno's brand position has been described as "Star Wars meets the Magic School Bus." Bill Nye The Science Guy® wrote a foreword for the Cogno novel series, and the business was featured in the Wall Street Journal. After winning 25 national product awards, the company is pursuing IP licensing in television, books and virtual world licensing.



In 2008, Cogno signed its first exclusive distribution deal for Cogno board and card games. The company continues to grow its internationally syndicated puzzlers for classrooms, now reaching over 450,000 children weekly. In 2009, the company also plans to develop a beta of its innovative virtual online world, called CognoWorld. www.cogno.com

Arch Angel Investment: \$240,000

DIVERGENCE, INC.

Divergence, Inc., a world leader in the application of genomics and informatics to agriculture and infectious disease, discovers and develops products for the safe and effective control of parasites. The company's initial focus is on parasitic nematodes, the devastating unseen pests that cause billions of dollars in annual crop loss and widespread disease in humans and animals.



DIVERGENCE

The Arch Angels' investment has provided Divergence the opportunity to advance several product candidates in agriculture and animal health, as the company moves toward collaborations or shareholder liquidity. www.divergence.com

Arch Angels Investment: \$127,500

EDUNN BIOTECHNOLOGY, INC.

Edunn Biotechnology, Inc. is developing unique oligonucleotide drugs to treat central nervous system diseases with specificity and safety. The company currently has two drugs in development. Edunn's OL-1 drug is designed to cure Alzheimer's disease and to treat Down syndrome. It is highly selective and has shown significant activity and safety in multiple preclinical models. The company's OL-202 drug would be used to treat stroke and traumatic brain injury.



Edunn Biotechnology, Inc.

Arch Angels Investment: \$405,000

GLOBAL VELOCITY

Global Velocity markets the GVS2000, a network-based cyber security solution helping government agencies and enterprises protect against critical data loss. The company's patent-pending technologies create the industry's first true wire speed content and application filter built upon an industry standard platform. Global Velocity is the only provider of a network-based cyber security solution capable of controlling both applications and content within the same appliance at wire-speed. The GVS2000 solution helps customers reduce costs of managing their growing and complex networks while at the same time protecting against the loss of their most critical digital assets.



global velocity
Next generation networking solutions

Global Velocity made significant progress during 2008, including: successfully deploying the first GVS2000 beta installation, executing several other beta evaluations contracts, closing a round of financing and opening a new round, contracting new patents and opening an office in Palo Alto, Calif. www.globalvelocity.com

Arch Angels Investment: \$455,000

GRIDLOGIX

Gridlogix helps customers manage energy, maintenance, compliance and security by using the Internet to extract real-time information from devices and sensors for control, monitoring and management. Gridlogix solutions are focused on solving problems in the machine-to-machine (M2M) or networked-device market and energy management arena. The Gridlogix EnNET™ platform integrates all building automation systems into a single, virtual, real time information source. As the world looks for energy answers, Gridlogix has emerged as a notable leader in providing the information and software critical for energy, carbon and sustainability strategies. Gridlogix customers include universities, schools, governments, Fortune 500 companies, hospitals, data centers, etc., many of whom are reducing energy usage by as much as 20 percent with quick payback and limited capital expense.



In fall of 2008, Gridlogix was acquired by Johnson Controls, taking another significant step in its evolution. The scale of Johnson Controls will enable more customers to leverage the benefit of the Gridlogix solution. With a broader base of customers and more open systems, other innovators will emerge to build richer and more extensive applications to help drive more savings and adoption, leading to a stream of unanticipated benefits. www.gridlogix.com

Arch Angels Investment: \$200,000

LORI COULTER

Lori Coulter developed the TrueMeasure line of apparel. Rooted in technology and fashion, Coulter's line features wearable swimwear that flatters the figure, fits and boosts self-esteem. Coulter utilizes the TrueMeasure fit system, a process that employs light and camera-based technology; the [TC]2 3D Body Scanner, a proprietary ordering and fulfillment system, and automated CAD technology. The scanner measures the entire human body in less than 12 seconds and produces a true-to-scale 3D body model within a minute that is more accurate and consistent than measurements taken by a trained professional. The technology-based approach to fashion is an innovation in the retail industry with automated customization and rapid turnaround times.

Lori Coulter
made-to-order swimwear

Lori Coulter Made-to-Order Swimwear launched at select Macy's locations in 2007 and launched a custom wholesale business targeting resorts, pageants and branded products in 2008. www.loricoulter.com

Arch Angels Investment: \$360,000

MEDIA CONVERGENCE GROUP, INC. (NEWSY.COM)

Media Convergence Group, Inc. proposes multiple businesses and revenue streams generated from a converged, digital newsroom that monitors, synthesizes and presents world news coverage. In an increasingly networked and globalized world, multiple perspectives of news is a necessity for informed citizens. Although access to news sources is abundant, most consumers consider the news media to be biased. The consumer lacks a convenient and coherent way to comprehend, synthesize and gain understanding. Additionally, demand for high-value online video advertising inventory remains unfulfilled.



The company's first product, Newsy, is a convenient and effective online news service that compares news perspectives, providing an unprecedented multisource view of the world's news coverage. Users are provided two- to three-minute smart video snapshots that highlight differences in coverage. Top brand advertisers are offered an exceptional online video advertising environment that commands top CPM and content licensing fees. www.newsy.com

Arch Angels Investment amount: \$175,000

SEQUOIA SCIENCES

Sequoia Sciences is a pharmaceutical company focused on commercializing new medicines to treat bacterial infections. These programs consist of small molecules targeting the lung infections of cystic fibrosis patients and MRSA infections, and vaccines for the treatment of recurrent urinary tract infections. In addition, Sequoia has an unparalleled collection of structurally diverse natural product compounds isolated from plants collected by the Missouri Botanical Garden. Sequoia is scheduled to initiate two human clinical trials in 2010. Both the cystic fibrosis and urinary tract infection markets appear to be without competition from new antibacterials in the foreseeable future.



During 2008, Sequoia selected a clinical candidate for its cystic fibrosis program, vastly improved its lead compound against MRSA infections and in-licensed a clinical stage vaccine for urinary tract infections from Washington University. In 2009, Sequoia is scheduled to complete animal toxicity studies for its cystic fibrosis development candidate, initiate animal toxicity studies for the urinary tract infection vaccine and make tremendous strides toward identifying a clinical development candidate for MRSA infections. www.sequoiasciences.com

Arch Angel Investment: \$5,805,000



AS OF DECEMBER 31,
2008, THE ST. LOUIS
ARCH ANGELS NETWORK
HAS:

- GROWN TO 48 MEMBERS
- RECEIVED MORE THAN
360 APPLICATIONS
- INVESTED ALMOST \$20
MILLION

SOMARK INNOVATIONS, INC.

SOMARK's goal is to improve drug development processes with a lab-animal identification system that is based on an RFID tattoo. A more reliable, advanced ID system can provide higher quality preclinical data that can translate into safer drugs and a shorter development period. And a shortened development timeline can increase the drug's patent life. SOMARK wants to help researchers create safer, cheaper and more effective treatments. The core technology is a platform with target markets from animal identification to wine bottle counterfeit prevention.



During 2008, SOMARK achieved a field demonstration of its technology with cattle, received the Young Entrepreneur of the Year award from the federal SBA and released a technology white paper. The company also added Greg Horowitz of UCSDA CONNECT and T2 Venture Capital to its Advisory Board. In 2009, the company plans to close on a new round of venture capital financing, conduct a successful customer pilot with research animals and secure revenue with initial product sales. www.somarkinnovations.com

Arch Angels Investment: \$425,000

TERAVISTA SYSTEMS

TeraVista Systems provides corporations with a unique toolset of technologies that streamline their environmental and energy practices, thereby saving time and money. Its patent-pending CarbonTrax software is designed to automate the verification, validation and aggregation of carbon credits for all aggregation companies and financial institutions. Only 10 percent of current credits are being spot-validated, but CarbonTrax solves this problem through remote sensing technologies that allow for 90 percent validation. www.tera-vista.com



Arch Angels Investment: \$50,000

U.S. SPINE, INC.

U.S. Spine, Inc., funded in 2005, is a privately-held medical device and implant company located in Boca Raton, Fla. The Company has developed a "traditional" line of six FDA-cleared products and recently launched its newest product, the Facet Fixation System (FFS). This device improves lumbar fusions and provides a much better solution for spinal stenosis procedures. The Company's strategy is to concentrate on the minimally-invasive and motion-preservation segments of the market.



Since inception, the Company has grown into a \$20 million enterprise. The Company anticipates achieving both positive cash flow and positive net income by the 4th Quarter of 2009. www.us-spine.com

Arch Angels Investment: \$5,900,000

FUNDING OPPORTUNITIES

Before seeking funding through the St. Louis Arch Angels, entrepreneurs are encouraged to gain a greater understanding of who we are, how we operate, what we look for in potential investments and our expectations for return on investment.

We receive many business plan submissions each month. Our funding process involves a thorough screening of each opportunity and results in approximately two companies per month being selected to present to our members for funding consideration.

INVESTMENT CRITERIA

Those seeking funds must make sure that they meet our investment criteria and that they are fully prepared with a complete business plan and presentation. We evaluate a company based on its management team, market opportunity, growth potential and other important factors, including:

Use of proceeds - Funds must be used to accelerate a company's achievement of key milestones that increase the company's value.

Competitive advantage - The company must have some proprietary features that distinguish it from potential competitors or provide barriers to entry that prevent other companies from capturing its customers with a similar offering.

Fit - One of the benefits of working with the St. Louis Arch Angels is the active coaching and contact network. There must be a fit between members of our group and the company seeking funding.

Technology - We prefer to invest in first-of-a-kind ideas, rather than incremental enhancements to common products and services. The concept behind the technology must be proven and verifiable.

Exit strategy - A clearly articulated exit strategy is very important.

ANGEL INVESTORS TYPICALLY:

- INVEST BETWEEN \$25,000 AND \$250,000 PER TRANSACTION INDIVIDUALLY AND FROM \$250,000 TO \$1,000,000 AS A GROUP.
- INVEST IN ONE TO FOUR TRANSACTIONS PER YEAR.
- ARE PATIENT, WITH AN AVERAGE HOLDING PERIOD OF THREE TO EIGHT YEARS.
- SEEK RETURNS IN THE RANGE OF 30 TIMES THEIR INVESTMENT DUE TO THE HIGH RISK OF ANGEL INVESTING.



**TO LEARN MORE ABOUT
THE ST. LOUIS ARCH
ANGELS:**

- VISIT US ONLINE AT:
STLOUISARCHANGELS.COM
- EMAIL:
CWALSH@STLRCGA.ORG
- CALL:
314-444-1151

APPLICATION PROCESS

We are eager to hear from companies that are seeking funding to help take them to the next level. Additional details about the Arch Angels' investment criteria and funding process are available online at www.stlouisarchangels.com.

BECOMING A MEMBER

Membership in the St. Louis Arch Angels is extended to individuals who share our vision and will actively contribute to our process. Our unique network of private investors includes many entrepreneurs who have founded and built their own companies and understand the unique challenges faced by entrepreneurs. Our goal is to grow the membership with individuals who are willing to invest both their dollars and their expertise.

If you are interested in learning more about joining the Arch Angels, please call Christine Walsh at 314-444-1151.

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