



2014
ANNUAL
REPORT

Celebrating Our 10th Anniversary

From the Chairman



The St. Louis Arch Angels Network closed out 2014 – our 10th year in operation – by hitting a major milestone, as we topped \$50 million in investments. Our first decade ended with a strong show of support for our local startup community, with members investing nearly \$10 million in 21 different companies during the year. Of these, five are new startups and 16 are previously funded companies receiving follow-on investments to help them on their continuing path to success.

For our 8th annual report, I wanted to take a moment to reflect back on the first year we published a report – 2007. It's amazing to see how much innovative entrepreneurial talent has grown and continues to thrive in the St. Louis region. In 2007, we had invested just shy of \$16 million in 13 active companies over those first three years, and the St. Louis Arch Angels network consisted of 45 members. Our membership has now grown to more than 80, and our investments have positively impacted 59 different startups.

As we look to 2015, I am enthusiastic about what lies ahead. There are a number of new technologies being created in the St. Louis metro area, and our local startups continue to be supported by a variety of local sources and organizations that are invested in their success. I am happy to see so many entrepreneurs moving into the region to take advantage of the technologies, mentors, resources and financing that will help propel them forward. We are also now in the beginning stages of an ag tech revolution, which continues to gain traction through the support of the Donald Danforth Plant Science Center and a new incubator – Yield Labs – that we are proud to support.

With these developing technologies and a growing number of startups planting roots in the region, financial collaboration remains essential for success, and the need for additional state funding is greater than ever. It was encouraging to see that the Missouri Technology Commission received more money in 2014 than in previous years, and I am hopeful that the state legislature will accelerate that trend.

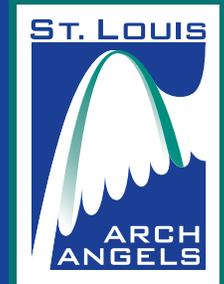
Looking to the future, we must also explore how we can better support the underserved entrepreneurial community that includes women, African-Americans, veterans and immigrants. Their innovations have the potential to contribute to the continued success of the region's entrepreneurial engine and help everyone share in our successes.

It's an engine that could have stalled amidst the turmoil of recent months that cast our city in a negative light, but despite the challenges, our local startup ecosystem has continued to grow, underscoring the fact that St. Louis remains an attractive place to start a business. As our community works to rebuild and move forward, support for early stage companies is a vital part of the solution. These small businesses collectively represent tremendous potential for the sustainable job growth that helps to stabilize our communities. We look forward to fostering that growth in the years to come.

Sincerely,

A handwritten signature in black ink that reads "Gilbert Bickel". The signature is written in a cursive, flowing style.

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 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. 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

ADARZA BIOSYSTEMS, INC.

Adarza is an emerging life science company developing a line of consumable products and instruments for sale in large research, drug development, In Vitro diagnostic and agricultural market segments. Adarza's products deliver industry-leading assay performance, reproducibility, cost-per-data point and a simplified workflow solution. Key accomplishments in 2014 included the completion of a \$6.8 million Series A equity financing and expanded operations in St. Louis that included key hires in R&D, product development and business operations. Key milestones in Q4 of 2014 included the leasing of long-term product development and manufacturing facilities in O'Fallon, Mo., and the execution of the company's first license and product supply agreement with a first adopter customer. In 2015, Adarza plans to complete technical and customer validation of its first product system, launch product marketing and sales efforts, complete the design engineering of its first commercial automated instrument system, hire a product manager, move administrative and accounting functions from Rochester to St. Louis and file additional patent applications.

www.adarzabio.com



Arch Angels Investment: \$1,650,000



AISLE411

Aisle411, which is often described as "Google Maps inside the store," is the world's leading product location data company for retailers. The year 2014 proved to be a growth year for aisle411. The company signed more retailers to the service and developed new strategic partnerships to expand its technology capabilities, including a partnership with Google on the company's Project Tango Platform device and one with Zebra Technologies with its beacon technology. Aisle411 is leading the market in indoor Product Data Acquisition and Location Positioning Technologies. Aisle411's technology is available in all 50 states and Puerto Rico in multiple apps and is growing. In 2015, the company expects to grow across retailer segments in the U.S. and internationally, with searchable retailer data expected to be gathered from over 250,000 locations by year-end.

www.aisle411.com



Arch Angels Investment: \$2,220,640

AKERMIN

Akermin is developing environmentally friendly, low-cost solutions to efficiently remove carbon dioxide (CO₂) from industrial gas streams. Akermin's proprietary Biocatalyst Delivery System (BDS) incorporates the enzyme carbonic anhydrase within permeable polymeric films to accelerate CO₂ separation. In 2013, through Department of Energy-supported projects, Akermin successfully completed testing of its BDS field pilot at the National Carbon Capture Center (NCCC) and began a new \$5 million project demonstrating a second generation approach to its technology. In 2014, a \$7 million commercial demonstration project for biogas upgrading was initiated in Copenhagen, Denmark. The company finalized a recapitalization in late 2014 with additional funding planned for the first quarter 2015.

www.akermin.com

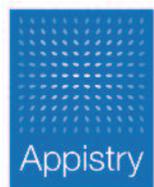


Arch Angels Investment: \$4,034,300

APPISTRY

Appistry is helping clinical labs, research institutions and hospitals practice genomically enhanced medicine by creating world-class bioinformatics tools, cloud services and software that streamline the analysis of next-generation sequencing data. This technology also makes genomics data easier for researchers and clinicians to act on and provides easy scale for moving research-developed pipelines into production. The Appistry CloudDx products provide cloud-based systems that help institutions conduct patient-centered translational research (CloudDx Translational) and help hospitals implement genome-scale tests based on next-generation sequencing (NGS) into routine patient care (CloudDx Clinical).

www.appistry.com



Arch Angels Investment: \$2,300,000

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.

APSE

Apse is developing technology for the large-scale and cost-effective production of RNA (ribonucleic acid) for use in RNAi (RNA Interference) applications in agriculture. RNAi technology has already been commercialized in GMO plants (host directed RNAi). There remains much potential for non-GMO RNAi topical applications in agriculture.

This includes potential uses for insect, disease and weed control, as well as others. However, such topical applications require large quantities of RNA, and these have been prohibitively costly. Apse intellectual property describes methods to reduce the cost of RNA production so that commercial uses are economically feasible. The company's technology uses well-proven large-scale fermentation and manufacturing processes. Apse is in collaborative discussions with four of the six largest global crop protection/agricultural biotechnology companies with an aim to enter into industrial collaborations, leading to out-license of specific product applications and/or company acquisition.



Founded as an LLC in 2011, Apse was converted to a "C" corporation in 2014.

www.apsellc.com

Arch Angels Investment: \$75,000

BACTERIOSCAN, INC.

BacterioScan is a St. Louis developer and manufacturer of diagnostic instruments and disposables for clinical microbiology labs, and has introduced a system for rapid detection of urinary tract infection (UTI). During 2014, the company completed the engineering development and launch of its first "research use only" product, with initial sales and deployment to about a dozen U.S. research hospitals and universities. The company also closed an oversubscribed Series A financing, and obtained ISO 13485 quality certification for its manufacturing operation. Beyond UTI diagnosis, BacterioScan is developing a new generation of compact microbiology platforms for rapid antimicrobial susceptibility testing to help address the worldwide challenge of antibiotic resistance.



www.bacterioscan.com

Arch Angels Investment: \$75,000

BENSON HILL BIOSYSTEMS

Benson Hill Biosystems, The Photosynthesis Company™, is an agricultural solutions company focused on increasing crop yield, principally by improving photosynthesis. The company employs an integrated, systems-based approach to target discovery and validation, and is developing a robust pipeline of next-generation trait candidates. Benson Hill Biosystems has closed a seed round of financing of more than \$2 million and has been awarded three federal grants totaling \$600,000 each in its field of improving photosynthesis. In 2014, the company validated its platform technology *in planta* and established multiple commercial partnerships to further its technology development and commercialization goals.



www.bensonhillbio.com

Arch Angels Investment: \$75,000

BONFYRE

Bonfyre is a leading social narrowcasting technology that better connects its users and customers to the people who matter. Each Bonfyre is an exclusive social network for real-time chat, photo and video sharing for family, friends, co-workers, shared experiences and more. In 2014, Bonfyre continued to focus on growth in the corporate market, extending engagement at company events to over 50 days, dramatically increasing impact and ROI. With a growing client list that includes Chipotle, Marriott, Express Scripts, Brown Shoe, Maritz and more, Bonfyre expects continued growth in 2015.



www.bonfyreapp.com

Arch Angels Investment: \$535,000

CAPITAL INNOVATORS

Capital Innovators provides tech startups with the funding, resources, and connections they need to reach the next level. The Capital Innovators Accelerator Program provides \$50,000 in seed funding and project-based mentorship from a seasoned pool of experts, along with stellar perks, networking, and follow-on funding opportunities over the course of 12 weeks. The STL Tech Fund has invested in 40 high-growth technology startups, and the Lindbergh Technology Fund will be investing in an additional 15 companies over the next year. Collectively, the Capital Innovators companies have raised almost \$140 million and have created over 500 new jobs. Since the program began in September 2011, the value of the total portfolio has grown by 3.5 times.

www.capitalinnovators.com



Arch Angels Investment: \$1,275,000

CARDIALEN

Cardialen is developing a revolutionary implantable device therapy that will improve the lives of people suffering from Atrial Fibrillation (AF) by restoring their natural heartbeat. Based on a breakthrough discovery by Dr. Igor Efimov at Washington University, Cardialen Therapy terminates AF in animals through an entirely new low-energy approach, a method that obviates the need for the painful high-energy shocks that hampered the adoption of prior implantable device therapies. AF is the most common sustained cardiac arrhythmia encountered in clinical practice, costing more than \$26 billion and 80,000 lives per year in the U.S. alone.

In 2014, Cardialen successfully raised an additional \$705,288 in its second close of Series A, which now totals \$3.3 million. In 2014, the company had eight additional patents issued, bringing the total of issued patents to nine; expanded its acute human trial experience, and achieved promising results on the path to human optimization of the therapy. In 2015, the acute AF human research clinical will be expanded to additional clinical sites to advance the studies and expand their IP.

www.cardialen.com



Arch Angels Investment: \$1,493,800

CELLARIDE

CellARide is a tech company that uses text messages to streamline the car buying process. CellARide sells its SaaS product, CarInfoToGo to auto marketers, OEMs and dealers. CarInfoToGo allows shoppers to use text messaging technology to receive a wide array of information about vehicles that are for sale. At the same time, it captures the shoppers contact info and creates a platform for conversation with the seller on the shopper's terms. In 2014, CellARide became the first startup eligible for GM's co-op dollars and had a successful paid pilot with Toyota USA. CellARide also hired its first employees, developing its infrastructure for future growth. In 2015, CellARide will be in talks with several accomplished players within the automotive space to further develop CarInfoToGo and determine the most effective distribution channels.

www.dealers.carinfoto.com

www.cellaride.com



Arch Angels Investment: \$100,000

CLEARENT

Clearent is a payment processing company that was built to be different. The company combines leading-edge technology with a passion for service to help its customers maximize the value of their merchant services program. Clearent provides sales agents, financial institutions and merchants with benefits not available from other providers, such as next-day funding with a late cut-off time and unrivaled graphical, web-based reporting. Clearent processes nearly \$6 billion in annual card volume and has twice been named to The INC 500/5000. Clearent is ranked by the *St. Louis Business Journal* as one of the fastest growing companies in the area.

www.clearent.com



Arch Angels Investment: \$1,100,000



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*. The company has been recognized with 25 national product awards for its work.



Cogno continues to grow sales of its internationally syndicated puzzles for classrooms, now reaching over 450,000 children weekly, and has published eBook versions of its novels.

www.cogno.com

Arch Angels Investment: \$240,000

CONFLUENCE LIFE SCIENCES

Confluence Life Sciences is a drug discovery and development company focusing on drugs for autoimmune diseases and cancer. Led by a world-class team, Confluence has developed the KINect Platform and has a portfolio of three preclinical drug projects that have potential utility in chronic inflammation, autoimmunity and cancer. These programs will result in two drugs ready for clinical trials in the next 18 months. In 2015, Confluence will be actively seeking a Series B investment that will fund two programs into clinical studies. The company is also seeking partnerships with pharmaceutical and biotechnology companies for its programs and/or access to the KINect Platform. The Confluence team has decades of experience developing drug candidates and has the proven track record to choose high-value programs, and then deliver viable clinical candidates. The Confluence goal is to build a sustainable drug discovery and early development company that generates the next generation of drugs from the KINect Technology Platform.



www.confluencelifesciences.com

Arch Angels Investment: \$35,000

COOLFIRE SOLUTIONS

Coolfire Solutions (CFS) develops game-changing mobile solutions that leverage its proprietary RONIN product suite to improve situational awareness for mobile workers. Integrating award-winning UX design with a deep expertise in security, CFS provides elegant solutions to complex problems in the defense, healthcare and satellite communications industries. In 2014, Coolfire Solutions achieved several significant milestones, including bringing the RONIN product line to market, spinning out MedAware Solutions, developing new relationships with significant enterprise customers and advancing the SADI (SATCOM) product line. Management expects that several significant milestones will be reached in 2015, including large-scale revenue from the RONIN product line, the commercial deployment of MedAware software, the commercial release of the SADI Product Line and continued inroads with significant enterprise clients.



www.coolfiresolutions.com

Arch Angels Investment: \$143,055

ELEMENTAL ENZYMES

Elemental Enzymes has developed a proprietary method to manufacture a variety of more stable enzymes. Since enzymes are used in a variety of industries, including drug discovery, bio-fuels, bio-waste, agriculture and manufacturing, there are a variety of applications for the technology. Elemental Enzymes formed a joint venture during 2013 with Dean Hendrickson, an Arch Angel member, and his partner Jim Zimmer to market its enzymes to the agricultural industry. Because of their relationships, and the performance of the enzymes, Elemental Enzymes conducted in 2014 over 500 field trials for corn and soybeans with many of the major seed companies. The company has completed a major licensing deal with one of the major seed companies. Elemental Enzymes should generate a significant amount of revenue in 2015 in both R&D and field trial milestones.



www.elementalenzymes.com

Arch Angels Investment: \$170,000

ENDOSTIM

EndoStim has developed a novel treatment for severe Gastroesophageal Reflux Disease that delivers electrical stimulation via a customizable neurostimulator (similar to a pacemaker) to the Lower Esophageal Sphincter. In a long-term clinical trial, all patients reported clinically significant improvement in reflux symptoms at their three-year follow-up on EndoStim therapy, and significant improvement was documented in objective physiological measures. EndoStim received CE Mark regulatory approval to commercialize its products in Europe and is leveraging the approval to commercialize worldwide. The EndoStim system has received initial reimbursement for 65 sites in Germany. EndoStim has received approval from the FDA to proceed with a 100-patient, double-blind sham-controlled study.

www.endostim.com



Arch Angels Investment: \$1,635,131

EUCLISES PHARMACEUTICALS

Euclises is a pharmaceutical company discovering targeted oral drugs to treat patients with colorectal and lung cancer using a simple urine test for patient selection. The company closed on a \$1.25 million Series A financing and has initial commitments for follow-on financing in 2015. The company completed a groundbreaking collaboration agreement with the Chinese government-sponsored Guangzhou Institutes of Biomedicine and Health, which may provide as much as \$2 million worth of research and development services. Euclises was issued one U.S. patent, licensed five patents, and will file seven patents in early 2015. The company hired a new CEO and added a CFO and VP of Business Development and is on track with its lead candidate to file an IND and begin human clinical trials in early 2016.

www.euclises.com



Arch Angels Investment: \$915,000

GALERA THERAPEUTICS

Galera Therapeutics is focused on the development of drugs targeting oxygen metabolic pathways. The company's lead compounds are small molecule dismutase mimetics, which closely mimic the activity of the human superoxide dismutase enzymes. While the biology of the superoxide dismutase family suggests a broad range of potential applications, Galera is initially focusing its development on the prevention of radiation-induced toxicity, including mucositis, and the treatment of fibrosis and cancer. In 2014, Galera's lead dismutase mimetic candidate, GC4419, completed the Phase 1b study in Head-and-Neck Cancer patients undergoing chemoradiation therapy, as initially designed. Based on the positive results seen, this study was expanded to test dosing throughout the entire course of radiation and will be completed in 2015, around the time a Phase 2b study begins. During 2014, Galera also discovered novel dismutase mimetics suitable for oral dosing, the lead candidate of which is expected to enter the clinic in 2015.

www.galeratx.com



Arch Angels Investment: \$1,164,400

GENERICO

Established in mid-2013, GeneriCo has rapidly become a global, fully operating business focused on developing and marketing generic pharmaceuticals in significant specialty segments of the rapidly growing \$400 billion U.S. generic drug market. The St. Louis co-founding team of industry experts has over 150 combined years of experience and is driven to bring difficult-to-make generic drugs to the U.S. markets by deploying a unique, innovative collaborator strategy. GeneriCo's expertise allows it to create generic products while avoiding expensive investment in all the aspects of drug development. The team has serial successes in targeted niche markets with over \$1.2 billion of generic drug launches. Recent acquisitions of specialty generic companies provided exits of \$400-\$750 million in five years.

www.generiopharma.com



Arch Angels Investment: \$100,000



AS OF DECEMBER 31,
2014, THE ST. LOUIS
ARCH ANGELS NETWORK
HAS:

- OVER 80 MEMBERS
- FUNDED 59 COMPANIES
- INVESTED OVER
\$50 MILLION

GLOBAL VELOCITY

Global Velocity develops Information-Centric Security (ICS) solutions to secure information in the enterprise and the cloud.

The company's vision is to provide affordable, easy to deploy, best-of-breed solutions to business, government and other organizations to protect their digital assets and help them achieve their compliance, audit and security requirements. In Q4 2014, Global Velocity began an active recruiting campaign to partner with trusted advisors, resellers and distributors in the security and compliance consulting, managed security services, and cloud service provider marketplace. The company achieved its goal of formally engaging 20 resellers in preparation for 2015 sales initiatives, including key partners such as the IBM Cloud Marketplace, UnitedLex and Productive Corp. By selling through these established, trusted advisors, Global Velocity will begin to see sales traction and growth beginning in early 2015.

www.globalvelocity.com



Arch Angels Investment: \$579,219

GRAEMATTER, INC.

Graematter has developed the first Regulatory Intelligence System, a patented information analytics system with advanced search capabilities that consolidates information from a large array of FDA-related data sources into a single database. This system addresses a major unmet need experienced by regulatory staffs in medical device, pharmaceutical and other companies. FDA hurdles for new product approvals have increased significantly, and regulatory professionals must go through a laborious, complex research process to successfully develop the technical, medical, statistical and regulatory elements of a new product submission. It is exacerbated by the fact that this public information is scattered over more than 100 databases.

Graematter began the ramp-up of sales and marketing activities in 2014.

www.graematter.com

Graematter

Think intelligence, not information.
Think Graematter.

Arch Angel Investment: \$90,000

HATCHBUCK

Hatchbuck (formerly Systematic Revenue) provides growing businesses with easy-to-use and affordable sales and marketing software that automates their sales and marketing efforts overnight. With Hatchbuck, a business can send highly targeted marketing communications and monitor the activity of each contact. In 2014, Hatchbuck reached 600 paying customers and achieved \$1 million of annual recurring revenue; launched great features into Hatchbuck, including Contact Scoring, eCommerce Integration and integration with hundreds of other cloud-based apps via Zapier, and built a training and certification program for attracting and retaining marketing agency partners. Hatchbuck also implemented a \$199 startup fee and began offering a six-month prepayment plan for a 10 percent discount. Early results show a significant drop in short-term customer churn, with an increase in revenue. The Hatchbuck Quickstart Package was released to all new customers. This new on-boarding tool is designed to get new customers up and running faster and enable them to be more successful on the Hatchbuck system.

www.hatchbuck.com

hatchbuck

Arch Angel Investment: \$2,025,000

IMMUNOPHOTONICS

Immunophotonics is an early-stage biotech company developing an *in situ* autologous cancer vaccine (inCVAX) for the treatment of metastatic solid tumors. In short, inCVAX is a two-injection procedure into one or more selected tumors intended to recruit and activate antigen-presenting cells, potentially triggering a cascade that leads to a systemic anti-tumor immune response. This approach is intended to use whole tumor cells as the source of tumor antigens from each individual patient without *ex vivo* preparations, complex laboratory functions or the pre-selection of antigens. In 2014, Immunophotonics executed a licensing agreement with a South American pharma partner and secured approximately \$2.5 million in investment to support IND efforts and the initiation of a clinical trial in South America.

www.immunophotonics.com

**IMMUNO
PHOTONICS**

Arch Angel Investment: \$715,000

ISLAND RADAR COMPANY

Island Radar's radar-based detection solutions have begun to be installed and used by five railroads. Two major transportation institutes have concluded long-term reliability studies. The positive results cited in these third-party validation tests are key to wide-spread acceptance and deployment in the rail industry. In 2014, Island Radar was awarded a second key patent related to the detection of blocked or obstructed crossings. The company's first international system was also installed in a partnership with one of the industry's major suppliers, General Electric. In 2015, the company expects to expand its crossing installations and customer base and post profitable earnings. A revolutionary system for train detection for use at locations where crossings and signalized traffic intersections must coordinate activity is being readied for mid-year introduction.

www.islandradar.com



Arch Angel Investment: \$200,000

IVDIAGNOSTICS

IVDiagnostics, which won the Olin Cup in 2011 for its life science business plan, is a biotech company focused on the delivery of real-time, non-invasive systems for monitoring diseases such as metastatic cancer. The IVD CTC assay has been used clinically to determine the effectiveness of treatment in cancer patients, and the next generation of the IVDxTx platform will optically scan tagged cells without taking blood. IVDiagnostics has prepared a new rapid assay for *in vitro* testing on human blood samples. The company will be launching a pilot study on 100 breast cancer patients across three hospital systems in Indiana. This activity has led to a license agreement with one of the largest CLIA laboratories in the U.S. for licensing and use rights to the IVD Onco Assay. With anticipated completion of the pilot study by July 2015, IVDiagnostics will be positioned for the next planned phase, which is expected to begin in the 2nd half of 2015. Revenue generation has begun in the form of sales of the proprietary IVD reagent. The sales model for growth near-term will be to focus on *in vitro* sales and licensing to healthcare systems throughout the U.S.

www.ivdiagnostics.com



Arch Angels Investment: \$117,400

KATALYST SURGICAL, LLC

Katalyst Surgical, LLC, is a designer, manufacturer and worldwide seller of precision ophthalmic surgical instruments for cataract and retina surgery. In 2014, Katalyst received two major investments, which triggered a clause that allows current Arch Angel members to maintain their ownership percentage. Katalyst raised additional funding in 2014 that should carry the company to self-sufficiency. No new equity rounds are anticipated. Katalyst has 20 active international distributors with 16 more in the process of joining the global sales team. Katalyst has effective world-wide sales coverage, which also brings many "Key International Opinion Leaders" to the Katalyst family of ophthalmic surgeons. These surgeons help the company design and test the new world class instruments and devices that Katalyst is known for, effectively accelerating the introduction of new cutting-edge instruments and maintaining Katalyst as the leader in ophthalmic surgery.

www.katalystsurgical.com



Arch Angels Investment: \$140,000

KINGDOM SCENE

Kingdom Scene launched the Lightgliders virtual world game for kids globally in the summer of 2014. Still in "beta," Lightgliders is a website, game and brand filled with innovative gameplay, unique characters, adventures, and activities for reflection. It was strategically designed to encourage significant conversations between kids and those who care about them the most in a fun, culturally relevant and global manner. Parents choose the setting that is best for their families – Positive Values or Biblical Faith. Kids create characters, go on quests, and engage with features designed to spark thought and conversation. The company has raised over \$3 million in angel investment. In 2015, Kingdom Scene will be raising capital, executing marketing strategies related to specific target markets and exploring brand extension, as well as transmedia opportunities.

www.kingdomscene.com

www.lightgliders.com



Arch Angels Investment: \$18,000



KOAGENT

Kogent Surgical is a designer, manufacturer and worldwide seller of

precision neurosurgical instruments and capital equipment. The initial Kogent offering in 2012 included warrants that allowed new members to double their investment at the same price per unit during 2014. The vast majority of these warrants were exercised in 2014, providing adequate cash to not only complete the R&D projects started in 2012 but also provide the working capital to take all products to market in 2015 and 2016. No new capital raises are anticipated. In early 2014, an agreement with Medtronic, Inc. was signed. This multi-year agreement gives Medtronic the ability to sell all Kogent products under the Kogent Surgical brand name wherever Medtronic has a direct sales force. This agreement provides coverage over approximately 80 percent of the globe by Medtronic's world-class sales force. The remaining 20 percent of the world is covered by experienced high-quality distributors.

www.kogentneuro.com



Arch Angels Investment: \$81,000

KYPHA

Kypha is a medical diagnostics company developing rapid, point-of-care tests to improve the way autoimmune and inflammatory disorders are monitored and treated. In 2014, the company completed development of the first two tests on its COMP ACT™

platform, which includes a portable reader for quantitative, real-time measurement. The products were transferred to commercial production in preparation for regulatory submissions. Clinical development progress highlighted the 2014 successes, with over 15 collaborative studies at nine major medical centers in the U.S. and Canada, generating clinical data in lupus, stroke, trauma and additional indications. The company successfully completed a \$3.5 million financing round, and successfully recruited critical talent and expertise to the board of directors, scientific advisory board, management team and staff.

www.kypha.net



Arch Angels Investment: \$180,000

LOCKERDOME

LockerDome helps users personalize their web experience. Through lockerdom.com and lockerdome-powered widgets, more than 75 million people per month use the platform to discover, collect and engage around things they like. More than 1,250 of the world's top media publishers leverage the platform to better engage and activate their audiences. The year 2014 was another breakthrough year as the company grew its audience (measured by monthly unique visitors) by over four times, added over 600 A-list publishers to the platform, increased fulltime headcount by 35 percent, and added team members to its New York City office. During the fourth quarter, LockerDome closed a \$10 million Series B funding round at a valuation of over 2.5 times greater than the Series A round closed in early 2013.

www.lockerdome.com



Arch Angel Investment: \$5,276,404

LORI COULTER, LLC

Lori Coulter works closely with resorts to design chic, elegant image apparel and uniforms for the country's trendiest hotels, including Wynn and Encore Las Vegas, The Cosmopolitan

Hotel and Casino, and The Fountainbleau Miami Beach Resort, among others. Exclusive collections can also be found through several brands, including Soft Surroundings, Cintas and Bra Smyth. The company continues to partner with department stores, specialty chains and catalog retailers to design and manufacture private label and branded swimwear, activewear and dresses. Rooted in technology and fashion, Lori Coulter's line features apparel utilizing the TrueMeasure fit system. The technology-based approach to fashion offers automated customization and rapid turnaround times for both consumers and businesses.

www.loricoulter.com



Arch Angels Investment: \$360,000

MOBIUS THERAPEUTICS

Mobius Therapeutics is a commercial-stage venture focused on ophthalmic surgery solutions. Its first product, Mitosol®, is a system for delivering antifibrotic agents in glaucoma, refractive and corneal surgery. The glaucoma indication is in active commercialization, and the pterygium and refractive indications are awaiting approval by the Food and Drug Administration. In 2014, Mobius increased sales by 80 percent over the previous year; achieved break-even from operations; enhanced reporting systems to include integration of billing & general ledger, CRM, and supply chain, etc., and continued investing in its sales team, increasing the direct sales force from four to nine. In 2015, Mobius expects to attain its first annual profit and positive cash flow, implement a Patient Assistance Program in connection with commercial payer reimbursement, and complete the transition of manufacturing to a new vendor, which will reduce costs.

www.MobiusTherapeutics.com



Arch Angels Investment: \$600,000

MOLECULERA LABS

Moleculera Labs is a fully-accredited CLIA/COLA clinical laboratory performing a proprietary test panel to identify children with PANDAS/PANS, a treatable neurologic condition associated with OCD, motor tics, and sometimes Autism Spectrum Disorder. Currently, no other tests are available to identify this infection-triggered autoimmune condition often associated with strep and other infectious agents. Children identified and treated with anti-infective and immune modulators experience remission of symptoms. Moleculera's clinical laboratory began operations in April 2013 and has received over 2,100 test orders from over 280 physicians and from U.S. and international partners such as Stanford Hospital. The company operates under an exclusive technology license from the University of Oklahoma.

www.moleculera.com



moleculera labs

Arch Angels Investment: \$160,000

NAWGAN PRODUCTS, LLC

Nawgan Products, LLC is a health and wellness beverage company founded by Dr. Rob Paul, a Professor of Psychology at the University of Missouri-St. Louis. The company launched its first beverage, Nawgan, in 2009 in St. Louis. Nawgan is currently sold in each consumer channel in the St. Louis region, as well as in several thousand health/wellness and grocery retailers throughout the U.S. The company obtained strategic funding from Kirin Holdings to support expanded distribution and sales of Nawgan and to further develop the product portfolio. The company experienced record growth in retail distribution and sales in 2014.

www.nawgan.com



Arch Angels Investment: \$173,000

NEUROLUTIONS, INC.

NeuroLutions, Inc., is focused on commercializing a motor rehabilitation device, the IpsiHand, which will be used to treat hemiparesis in stroke survivors. Every year in the U.S., approximately 318,000 people are diagnosed with chronic hemiparesis after a stroke, representing an annual market of \$1.3 billion. The IpsiHand is a unique rehabilitation device that directly connects intention to move, detected from the brain by an EEG (electroencephalography) headset, with hand movement, executed by a wearable robotic hand exoskeleton. The company is currently conducting a clinical trial at Washington University to demonstrate improved hand function from rehabilitation with the IpsiHand.

www.neurolutions.com



Arch Angels Investment: \$100,000



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.

NEWLEAF SYMBIOTICS

NewLeaf Symbiotics pursues R&D on beneficial plant bacteria called PPFMs. In 2014, the company raised a \$17 million Series B funding round and increased its space in the Bio-Research

and Development Growth Park in St. Louis from 1,500 to 7,500 square feet. Field trials have expanded on corn, soy, lettuce and other vegetables. NewLeaf has put in place a Scientific Advisory Board, chaired by Jim Carrington, president of the Danforth Plant Science Center. The company has grown its St Louis-based team with key recent hires in product development, business development, bioinformatics, and horticulture. NewLeaf continues to develop its Prescriptive Biologics platform technology, expand its IP portfolio, and expects to commercialize its first products in the near future.

www.newleafsym.com



Arch Angels Investment: \$100,000

PIXEL PRESS

Pixel Press is a technology company focused on building engaging mobile gaming experiences for both sides of the brain: the analytical left side and the creative right side. The company's "build your own video game" technology platform integrates physical and digital play, adding new dimension to toys and video games, educational content, traditional storybooks and other entertainment mediums.



In 2014, Pixel Press released its first product, Pixel Press Floors, which has since been downloaded over 300,000 times, with users having created over 100,000 games. In 2015, Pixel Press plans to release Game Wizard in partnership with the Cartoon Network and expects sales in over 25 countries. Pixel Press will also release its next generation game-building technology.

www.projectpixelpress.com

Arch Angel Investment: \$167,500

PULSE THERAPEUTICS

Pulse has developed a novel therapy for acute ischemic stroke, which improves fluid dynamics in stagnant flow vessels, often seen in stroke, by using a rotating external magnetic field to preferentially direct its proprietary intravenously-injected, iron-based MED MicroBeads™



and a clot-busting drug at a rate 10 times that of normal diffusion. The unique system allows for immediate and non-invasive therapy in the stroke center. The company demonstrated efficacy in its seven-patient, First-In-Human clinical study in Australia and will commence U.S. human clinical trials in mid-2015 under the FDA's early feasibility program. The company holds five granted patents and has been awarded two NIH grants. Pulse is now led by Sean Morris, an experienced life science entrepreneur.

www.pulsetherapeutics.com

Arch Angel Investment: \$1,260,000

RADIALOGICA

Radialogica is a bioinformatics company focused on radiation oncology. The company empowers healthcare providers and payers with tools, data and insight to improve quality of care and reduce the physical and financial burden of cancer treatment and survivorship. In 2014, Radialogica continued to enhance the functionality of its fullAccess software platform and completed a quality audit for a large insurance company, leading to the first deployment of its payer analytics platform. The company also received ISO certification and CE marking of its software. In 2015, Radialogica anticipates the commercial launch of its payer analytics platform, continued sales of fullAccess for clinical and educational applications in the U.S. and select international markets, and entry into the oncology registry arena.



www.radialogica.com

Arch Angels Investment: \$500,000

SEQUOIA SCIENCES

Sequoia Sciences is a pharmaceutical company commercializing new medicines to treat bacterial infections and certain cancers. Programs include targeting MRSA infections, the lung infections of cystic fibrosis patients and vaccines for the treatment of recurrent urinary tract infection (UTI). Sequoia has begun clinical trials for its UTI vaccine and has begun marketing the program for sale. It has optimized its lung cancer compound to a point that it appears to be superior to the taxanes, the most widely prescribed drug class for solid tumors. Having completed successfully large animal toxicity studies, Sequoia will begin marketing the cancer program for sale in early 2015.

www.sequoiasciences.com



Arch Angels Investment: \$6,717,000



SIXTHIRTY

SixThirty provides fintech startups with \$100,000 in funding, mentors, and connections to the top financial services companies in the country. Backed by the St. Louis Regional Chamber and venture capital firm Cultivation Capital, SixThirty selects eight financial-based technology startup companies each year – four in the fall and four in the spring. Those companies selected to take part in the four-month accelerator program will receive hands-on training, mentoring and networking opportunities with the top financial services companies in the region.

www.sixthirty.com



Arch Angel Investment: \$800,000

SYNERZ MEDICAL, INC.

SynerZ Medical, Inc., is a medical device company focused on the treatment of obesity and type 2 diabetes. SynerZ is developing a unique approach to addressing this disease through the use of its proprietary, stent-like device, Aegis™. Aegis is being designed to take advantage of the clinically proven principles and actions of Roux-en-Y gastric bypass surgery and, as currently conceived, would be implanted and removed under conscious sedation via a minimally invasive endoscope. Aegis intends to offer patients (both clinically obese and overweight), specialists and payers a comparably effective, simpler, safer, less-evasive and less morbid alternative to current bariatric surgical procedures and existing single-action devices, while also significantly reducing costs.

Arch Angels Investment: \$25,000



TRACKBILL

TrackBill is a simple, yet robust, platform empowering government affairs professionals to search, track, and report on legislation in all 50 states and the U.S. Congress. Corporations, professional service firms, and interest groups alike rely on TrackBill to spend less time tracking legislation and more time impacting the outcome. TrackBill formalized its sales pipeline in 2014 and projects sales to increase by 280 percent in 2015.

www.trackbill.com



Arch Angel Investment: \$275,000

TRAXSSON

Traxsson is developing cancer diagnostic technologies for prostate and lung cancer, and a broad-cancer screening test for multiple cancers. Traxsson's prostate diagnostic is a serum test to differentiate between aggressive and indolent cancer. Currently, highly invasive biopsies are done to determine indolent from aggressive prostate cancer. Nearly 50 percent of aggressive cancers are misdiagnosed, leading to over-treatment. The global revenue potential for the prostate cancer diagnostic is \$1 billion, with lung cancer exceeding \$250 million. Traxsson plans to offer both cancer tests as CLIA Laboratory Tests (LDTs), allowing Traxsson to commercialize without the need for FDA approval. In 2014, a multi-center verification study was completed with high results in sensitivity and specificity. In 2015, Traxsson will complete a 600-sample validation for the prostate test.

www.traxsson.com



Arch Angel Investment: \$525,000

TUNESPEAK

Tunespeak is the new fan club for music. The company's mission is to help artists identify and reward their most passionate fans. Tunespeak launched in January 2013, has raised \$1,300,000 (led by Cultivation Capital) and run thousands of campaigns with hundreds of the biggest artists in the world, including Dave Matthews Band, Blake Shelton, Maroon 5, John Mayer, Lionel Richie, Kings Of Leon, Miranda Lambert and many more. Tunespeak has engaged millions of music lovers across the world and driven more than 100 million fan actions online.

www.tunespeak.com



Arch Angel Investment: \$625,000

VENITI

Veniti is a medical device company focused on developing technology for the management and treatment of venous insufficiency. In 2014, the company commercialized its first product, the VENITI VICI VENOUS STENT SYSTEM, and began selling the CE-marked product in EU countries through independent agents and distributors. The company will continue to expand to new markets in 2015, including Poland, Australia, the Nordics, as well as other geographic regions. In addition, the company received an IDE for its VIRTUS trial, designed to provide clinical evidence for the safety and efficacy of its venous stent. The purpose of this trial is to obtain FDA approval to commercialize the stent in the U.S. Trial enrollment is underway in multiple sites in Europe and the U.S.

www.venitimedical.com



Arch Angel Investment: \$354,000

YIELD LAB

The Yield Lab is focused on bridging the critical gap between innovation and fruition of new agricultural technology by supporting early stage companies. The Yield Lab provides new AgTech companies with \$100,000 in funding, mentors and connections supported by an agriculturally solid framework of organizations and businesses from the St. Louis area.

www.theyieldlab.com



Arch Angel Investment: \$300,000

UPDATE ON OTHER COMPANIES IN WHICH THE ARCH ANGELS NETWORK HAS INVESTED:

Cervimark ceased operations in 2009

Divergence was acquired by Monsanto in 2011

Edunn Biotechnology ceased operations in 2013

Gainsight, formerly JBara, had a liquidity event in 2013

GameRail ceased operations in 2008

Gridlogix was acquired by Johnson Controls in 2009

LangLearner suspended operations in 2013

Media Convergence Group, Inc. (Newsy.com) was acquired by E.W. Scripps in 2013

Somark was acquired by Two Oceans Pty Ltd. in 2013

TeraVista Systems ceased operations in 2011

U.S. Spine was acquired by Ametica Corporation in 2010

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.



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

■ VISIT US ONLINE AT:
STLOUISARCHANGELS.COM

■ EMAIL:
[CWALSH@
STLREGIONALCHAMBER.COM](mailto:CWALSH@STLREGIONALCHAMBER.COM)

■ 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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