



2018

St. Louis
Arch Angels
Annual Report



ENGAGING ACCREDITED
INVESTORS IN ST. LOUIS'
STARTUP **ECOSYSTEM**

From the Chairman



It is my pleasure to report that 2018 was another exciting and successful year for the St. Louis Arch Angels and indeed for the entire St. Louis Startup Ecosystem. As of December 31, 2018, concluding our first 14 years, the Arch Angels have invested \$87 million in 102 startup enterprises.

We achieved those numbers because we operate within a very strong enabling startup ecosystem. This, the St. Louis Startup Ecosystem, is made up of four broad and interlocking components; Funding, Facilities, Acceleration and Community Resources. The specific entities underlying each of these components are now very experienced in the world of business startups and provide increasingly greater value to startups looking for a wonderful environment within which to build their futures. The key to continued growth and success of this Ecosystem is for all of the entities/ subsets of these interlocking components to continue to operate in tandem, one with another.

During 2018, networking within this Ecosystem allowed the Arch Angels to connect with approximately 135 entities seeking funding for the first time. Of those entities, approximately 57 formally entered our investment process by submitting to a pre-diligence review by our in-house staff. From there, 31 were invited to present to our Screening Committee and 20 of those ultimately pitched to our full membership. In addition, we had 20 of our existing investees come back to pitch for capital in post seed rounds to support their continued growth. All of this resulted in opportunity for our membership who invested in 9 of the 20 pitches that were new to the Angels and all 20 of the returning investees.

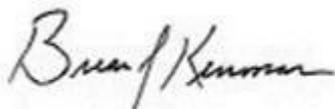
The Angels want to ensure that we contribute more than just capital to the Startup Ecosystem, so we provide all entities we touch with constructive feedback as well as work to specifically support and mentor all of our “portfolio companies”. In addition, our members work hard to support the overall ecosystem through participation in the mentoring programs of entities like I-Ten, Capital Innovators and Cultivation Capital as well as by supporting the local Community Resource programs like Arch Grants and Washington University’s entrepreneurial studies initiatives.

This cooperation between and among the elements of our ecosystem will grow to be even more important in future years. That is because we continue to see some elements of the ecosystem moving up channel in their investment philosophy by investing increasingly in A round instead of seed round opportunities. While this will also strengthen the ecosystem, it places the Arch Angels in the position of becoming one of the few formal elements that will support the seed round investments required to attract new enterprises to our area.

Thus, the Arch Angels must continue to grow our membership to ensure we have the capital to support our increasingly important role in the ecosystem. I am pleased to report that during 2018 the Angels admitted 13 new members to our ranks. We all need to work to help Accredited Investors from across the St. Louis Metropolitan area understand the intrinsic as well as financial opportunities that come with membership in the St. Louis Arch Angels and by extension the St. Louis Startup Ecosystem.

I want to recognize and thank several groups who help us achieve our success. These include; the members of our Board of Directors for all of their work this year: Jay Baumohl, Chris Dalton, Marie Carlie, and Brian Estes. Their contributions have been invaluable. Our staff members Chris Walsh and Anne Schweitzer have been wonderful and keep us organized, progressing and easy with which to deal. Also our incredible due diligence interns from Washington University who work hard and conduct great research to help us prepare for investment decisions. Additionally, our corporate partners who provide their expertise, support and service to our members and investees. And finally, all of our Members who contribute enthusiasm, experience and capital and who maintain our culture of excellence and drive that supports and benefits the Startups of the St. Louis ecosystem.

Best regards,



Brian Kinman

Chairman and CEO

Mission Statement

During 2016, we evolved our **Mission Statement** in a manner that is consistent with the growing and expanding St. Louis Startup Ecosystem and our role in that Ecosystem.

Our Mission Statement follows:

“We are a select group of accredited investors with diverse expertise and experience seeking high potential startup ventures drawn from the St. Louis Startup Ecosystem to fund and support, resulting in success for our funded companies and outsized returns for our members and corporate partners.”

This Mission Statement reminds our board every day of the complexity of our charge and drives our operating decision making.

We recognize our position in the Ecosystem and strive to ensure we manage up to all of our stakeholders’ expectations.

2018 Overview

2018 Companies Receiving Investments –**30**

New - **10**

Follow On - **20**

2018 Investments - **\$8,324,099**

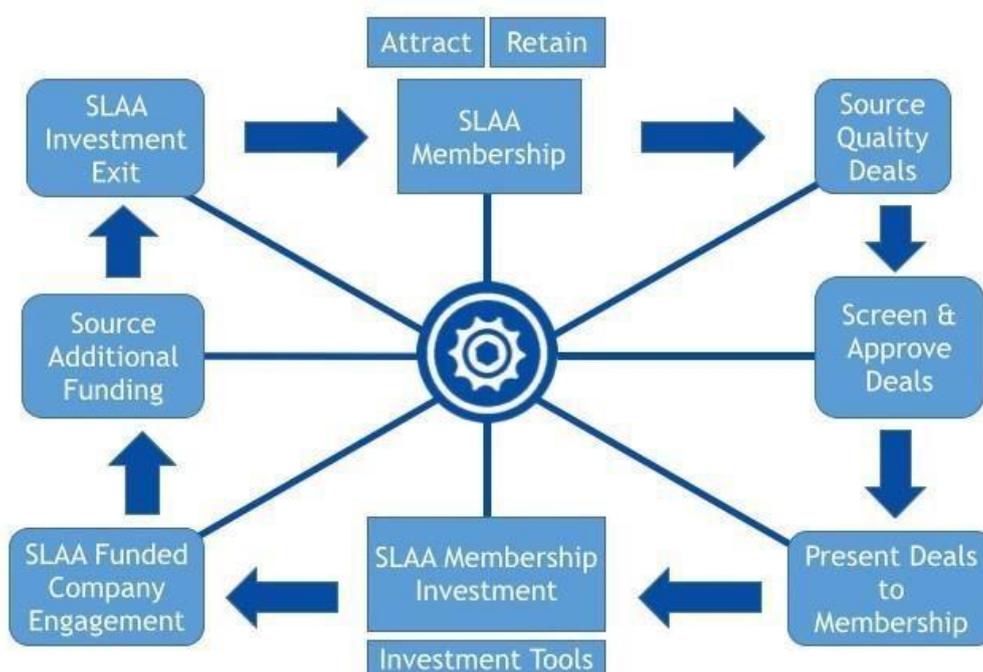
SLAA Cumulative Investments - **\$87,419,337**

Our Operating Processes

Our board is focused on bringing our members the best possible Angel investing experience. We refined our operating process in 2016 (see the “Fly Wheel” below) and have spent the past two years improving our execution of that process. We believe that our role in the St. Louis Startup Ecosystem should drive our cooperation with other elements of the Ecosystem and ensure that we also provide a great experience to the founders who present their deals to our members. We may not invest in all the deals presented, but we work hard to provide meaningful feedback and guidance to all the founders who apply for funding.

The St. Louis Arch Angel Investing Fly Wheel

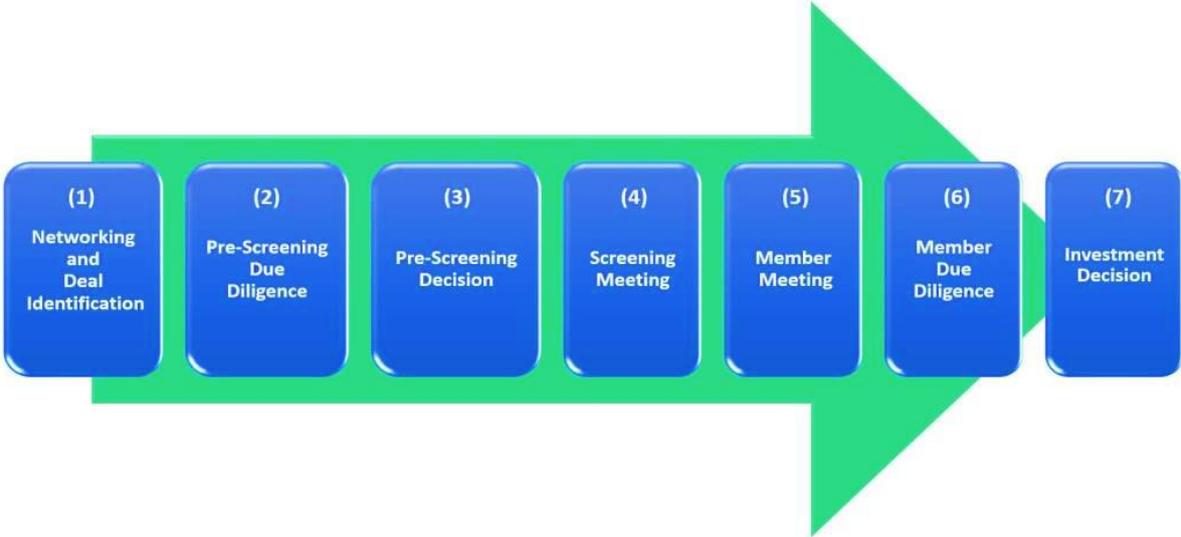
To visually demonstrate this process, the Board created the **St. Louis Arch Angel Investing Fly Wheel**, which shows each step in our strategy to move deals toward increased valuations and a faster exit, focusing on **deal quality, membership involvement with the process and with the company**, and acknowledging the ability of the Angels to bring in additional resources **to support our investments and the St. Louis Startup Ecosystem**.



To go a little deeper, we have developed the following chart to show our process from learning of a company's existence through the company receiving Angel investment.

St. Louis Arch Angel Investment Process

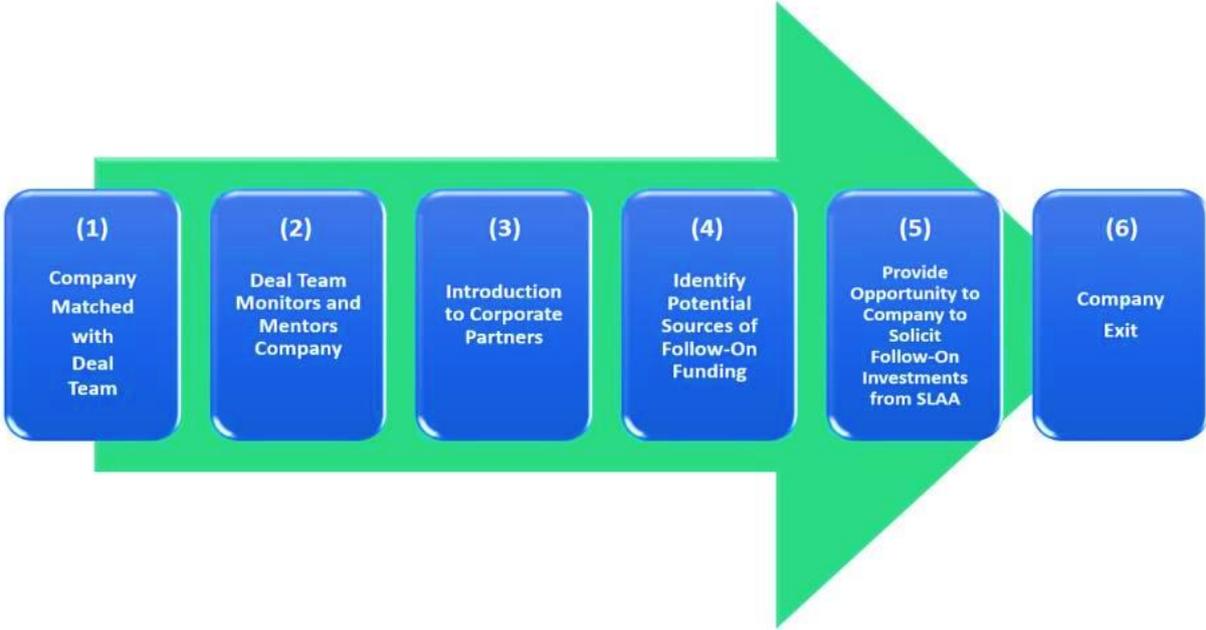
The key elements of each of the seven steps are described below:



- | Step | Description |
|--|---|
| 1) <u>Networking / Deal Identification</u> : | Members of our board routinely network with all the accelerator funds in the Ecosystem as well as with other key influencers to identify potential investible deals. |
| 2) <u>Pre-Screening Due Diligence</u> : | Founders are invited to apply to the Arch Angels through our proprietary link on Gust and our Interns begin to collect information and data on the startups based on predetermined guidelines. |
| 3) <u>Pre-Screening Decision</u> : | Members of our board meet and agree whether or not to move forward with the deal evaluation based on the preliminary data accumulated in step 2. |
| 4) <u>Screening</u> : | The screening committee meets with the founders to hear their pitch and to challenge the founders on their business plans, deal terms and other matters leading to a go/no go decision for presentation to our members at the month end member meeting. |
| 5) <u>Member Meeting</u> : | Members gather on the last Wednesday of each month to hear the selected pitches, ask questions of the founders and to discuss the merits of each potential deal. |
| 6) <u>Member Due Diligence</u> : | Members interested in investing in a particular deal form a deal team, appoint a deal lead and begin due diligence. |
| 7) <u>Investment</u> : | When the deal team decides to invest, the investment tools are used to create unique LLCs to bundle the investments of each individual member. This bundling has many times allowed for a stronger negotiation base including the ability to receive board participation or observation rights. Members are also able to invest as individuals. |

Following investment, the Arch Angels continue to engage with the company as we help move it to a successful exit. The chart below outlines the post investment activities:

St. Louis Arch Angel Post Investment Process (Funded Company Engagement)



The Funded Company engagement phase involves the selection of key interface points between the company and the Arch Angels deal team. This is followed by developing the standards for ongoing monitoring and mentoring of the company by the deal team.

During this phase, we also introduce one or more of our Corporate Partners who may be able to help the company as it moves from startup to a real operating entity. Additionally, the Arch Angels stay involved in helping the company determine when additional funding may be necessary as well as helping to identify potential sources of follow-on funding. The Arch Angels provides our existing investments the opportunity to return to solicit follow-on funding from our entire membership at the appropriate time.

These and other activities demonstrate our commitment to our startup investments as we help them move toward an exit that benefits us all.

About the St. Louis Arch Angels

A Network of Investors

Established in January 2005, the St. Louis Arch Angels is an independent, not-for-profit 501c(6) corporation. The group was established to help individual Angel investors work together to mutual benefit, sharing ideas, insights into the market, and expertise.

Since inception, the Arch Angels have been vital to the success of the St. Louis Startup Ecosystem by providing seed and early investment to startups in the range of \$50,000 to \$1,000,000, an investment need that is often underserved by institutional venture capital firms. Because of this, our network is an important element 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/or 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 fund raising. Members do not invest in a pooled fund, but rather as individuals with other members of our network. We recommend our members consider a minimum annual investment of \$50,000. Members always invest under the same terms and conditions. The network's activities are guided by its bylaws and rules of membership.

Leadership

The St. Louis Arch Angels is governed by a Board of Directors composed of the following officers:

Chairman: **Brian Kinman**

Chairman Emeritus: **Gil Bickel**

Vice Chairman: **Chris Dalton**

Treasurer: **Jay Baumohl**

Secretary: **Marlie Carlie**

Member at Large: **Brian Estes**

Becoming a Member

Membership in the St. Louis Arch Angels is extended to accredited investors 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 their expertise and time as well as their dollars.

If you are interested in learning more about joining the Arch Angels, please call Christine Walsh at 314-503-1019.



2018 New Investments

The companies outlined below represent companies who have presented to the Arch Angels during a membership meeting and who have received investment directly from St. Louis Arch Angels, either as individuals, LLCs, or through partner accelerators.

Through December 2018, members of the group have made initial investments in the following companies:

Canopy Biosciences

Canopy Biosciences provides research tools for genetic engineering, molecular biology, and personalized medicine. Founded in 2016 by industry veterans in biomedical research and genetic engineering, Canopy has successfully identified cutting-edge technologies from some of the world's most respected academic institutions and rapidly brought them to market as innovative products and services. Canopy Biosciences announced the introduction of a new catalog of over 2000 knockout cell lines and cell lysates. Catalog has been generated using CRISPR-Cas9 technology. CRISPR has revolutionized gene editing, but not everyone has both the access and ability to master this complicated technology. Canopy has focused on lowering the barriers to entry to CRISPR. The new knockout cell lines and lysates are available to purchase immediately from Canopy's website, www.canopybiosciences.com

2018 Investment: \$250,000

Initial Investment Year: 2018

CHECKTHEQ

CheckTheQ is a plug-and-play subscription-based service designed to help venues by tracking line wait times in real-time, providing analytics and a suite of tools to share those wait times with customers. CheckTheQ works at every place where people congregate: airports, stadiums, retail, and other venues

2018 Investment: \$10,000

Initial Investment Year: 2018

2018 New Investments

KaloCyte

KaloCyte is developing ErythroMer, a dried, bio-inspired artificial red blood cell, to treat life-threatening blood loss when stored red blood cells are unavailable, undesirable or in short supply. It raised \$800,000 in June 2018 to further its development of ErythroMer. Elaine E. Haynes joined as CEO in August 2018. Haynes brings expertise to KaloCyte from her time as an executive at Mallinckrodt and as a nuclear pharmacist.

2018 Investment: \$945,000

Initial Investment Year: 2018

Life Equals

In February 2019, Life Equals completed a \$2.35 million round that included Dream pact Ventures, whose members participate with the St. Louis Arch Angels, as well as several other Arch Angel members. Life Equals also rebranded to Balance the Superfood shot.

2018 Investment: \$800,000

Initial Investment Year: 2018

ProteoSense

In April 2018, ProteoSense was selected for Village Capital Startup Cohort. Village Capital manages the longest-running program in the United States for startups building a more sustainable, healthy and accessible food and agriculture system. ProteoSense's RapidScan - company's patent-pending handheld testing system - moves to next stage in preventing foodborne illnesses.

2018 Investment: \$50,000

Initial Investment Year: 2018

2018 New Investments

Rozzy Learning Co.

Rozzy Learning Co. prepares students for the careers of the future by creating programs that let students experience real world careers through fun and engaging hands-on lessons. Allison Bischoff of Rozzy Learning Co. was selected as the winner of the Business Journal's Catapult Competition sponsored by Mastercard.

2018 Investment: \$275,000

Initial Investment Year: 2018

StatRoute

StatRoute is a Sports Tech company, creating a P2P network to make Data Analytics easy and accessible for all Sports Bettors, Fantasy Sports Consumers, & Analysts to collaborate, share, and find data that has never been accessible before. StatRoute also participated in Capital Innovators' Spring 2018 accelerator class

2018 Investment: \$125,000

Initial Investment Year: 2018

SwipeSum

SwipeSum plans to double its workforce after raising \$1 million in its seed round. In May 2018, SwipeSum offered free services to St. Louis businesses. SwipeSum moved its headquarters to St. Louis from Los Angeles.

2018 Investment: \$450,000

Initial Investment Year: 2018

2018 New Investments

Transactly

Transactly is a digital platform that allows real estate buyers and sellers to collaborate and negotiate during the purchase process. Ten years after the housing crisis, Transactly is trying to make real estate more transparent.

2018 Investment: \$100,000

Initial Investment Year: 2018

Viosera Therapeutics

St Louis-based startup, Viosera Therapeutics, is fighting the war against antibiotic resistant MERSA. Viosera boasts a scientific team that is working to slow the rise of super bacteria by using three different antibiotics together. They are in this year's Y Combinator cohort.

2018 Investment: \$185,000

Initial Investment Year: 2018

2018 Follow-on Investments

Acera

Acera is a bioscience company commercializing implantable nanomedical scaffolds for medical applications, such as soft tissue repair. A report states that the “Soft Tissue Repair” market will record a promising 5.5% CAGR over the forecast period. The market will rise from a valuation of US\$4.3 billion in 2014 to an opportunity of US\$7.3 billion by the end of 2024. Medical Devices startup, Acera Surgical, raised \$10.1 million in funding in October 2018.

2018 Investment: \$125,931

Cumulative Investment: \$865,931

Initial Investment Year: 2013

Arvegenix

In November 2018, Arvegenix raised \$2 million from Bayer Growth Ventures, BioGenerator, and the St. Louis Arch Angels to take the total funding amount to \$6.9 million. Arvegenix rebranded itself as CoverCress. CoverCress’ rebranding comes from its under-development CoverCress crop based on the native plant pennycress. CoverCress has genetically improved a plant once considered to be a weed--spindly, flat- seeded pennycress--to create a new variety called covercress which can act as a "shoulder season" crop to give farmers more harvest and more profit.

2018 Investment: \$185,000

Cumulative Investment: \$2,429,997

Initial Investment Year: 2015

BacterioScan

The St. Louis Arch Angels first invested in BacterioScan in 2013. In May 2018, BacterioScan received FDA approval for its product BacterioScan 216DX that helps doctors quickly diagnose urinary tract infections.

2018 Investment: \$50,000

Cumulative Investment: \$275,000

Initial Investment Year: 2013

2018 Follow-on Investments

Capital Innovators

While Capital Innovators' earlier years focused mainly on St. Louis startups, since 2014 the majority of the companies have been from elsewhere, including a few international selections. However, this year, after receiving 350 applications from 56 countries and 35 states, Capital Innovators chose 6 cutting-edge startups for its spring 2019 program, and five out of six companies in Spring 2019 cohort are from St. Louis.

2018 Investment: \$200,000

Cumulative Investment: \$2,006,250

Initial Investment Year: 2011

Cardialen

In October 2018, Cardialen raised \$17 million in Series financing for Heart Rhythm Therapy. The financing will be used to advance Cardialen's clinical program with further human testing of its unpinning termination (UPT) therapy and begin development of an implantable device.

2018 Investment: \$455,000

Cumulative Investment: \$4,403,300

Initial Investment Year: 2009

Cultivation Capital Funds

Members of the St. Louis Arch Angels also invest in Cultivation Capital's various funds. Cultivation Capital then invests in startups in the St. Louis region and beyond. The St. Louis Arch Angels and Cultivation Capital have supported many of the same startups, and together have a broad portfolio.

2018 Investment: \$1,081,150

2018 Follow-on Investments

Epharmix

Epharmix offers condition-specific communication tools that allow care teams to remotely monitor patients. Illinois-based OSF Healthcare system is utilizing the technology from Epharmix. OSF piloted Epharmix on approximately 300 patients and saw 70% enrolment with 78% patient engagement. OSF will deploy Epharmix to every home care patient within the organization. Epharmix is expanding across the country to organizations in Washington, D.C. and Denver as well.

2018 Investment: \$250,000

Cumulative Investment: \$360,000

Initial Investment Year: 2015

Euclises

Euclises has developed a therapy to slow and in some cases eradicate tumors. CEO and St. Louis Arch Angels member Bobby Sandage presented to the Angels in January of 2018, and received follow-on funding from the group. The company first received funding from the Angels in 2012.

2018 Investment: \$90,000

Cumulative Investment: \$2,471,250

Initial Investment Year: 2012

Finlocker

A startup in the fintech space, Finlocker secured a third patent in July 2018, further innovating its proprietary analytics engine and digital vault functionality. Finlocker's asset verification solution received approval from Fannie Mae's Desktop Underwriter validation service.

2018 Investment: \$50,000

Cumulative Investment: \$1,945,000

Initial Investment Year: 2016

2018 Follow-on Investments

Galera

In September 2018, Galera Therapeutics secured \$150 million in funding to drive its head and neck cancer treatment lead compound – GC4419 into Phase III trials, as well as to support pre-commercialization activities. In October 2018, Galera started Phase III clinical trials for GC4419.

2018 Investment: \$745,000

Cumulative Investment: \$3,084,000

Initial Investment Year: 2010

Kogent

A Neurosurgical Navigation Systems market report was published in February 2019 that presents a comprehensive overview, market shares, and growth opportunities of Neurosurgical Navigation Systems industry by product type, application, key manufacturers and key regions and countries. Kogent Surgical products belong to the same industry.

2018 Investment: \$25,000

Cumulative Investment: \$131,000

Initial Investment Year: 2013

Kypha

In July 2018, Kypha acquired Biosensia, a diagnostics platform and contract development company that strengthens Kypha's product commercialization.

Kypha has been awarded US and Australian patents on complement biomarker testing and point-of-care assessment of complement-associated disorders.

In December 2018, Kypha secured \$4 million in Series A funding led by Arsenal Capital Management to complete integration of recently acquired Biosensia, to support commercial launch of additional Kypha tests and to expand partnerships with leading-edge pharmaceutical companies.

2018 Investment: \$5,000

Cumulative Investment: \$200,000

Initial Investment Year: 2012

2018 Follow-on Investments

Moleculera

The St. Louis Arch Angels first invested in Moleculera in 2013. The company continues to see success. New research in September 2018 shows that biomarkers included on Moleculera Labs' Cunningham Panel™ are helpful in identifying a subset of autistic children likely to benefit from IVIg therapy.

2018 Investment: \$100,000

Cumulative Investment: \$485,000

Initial Investment Year: 2013

Plastomics

Plastomics raised \$900k+ in convertible debt financing from St. Louis Economic Development Partnership and St. Louis Arch Angels in December 2018. Plastomics' technology entails placing crop traits in a plant's chloroplasts (hundreds per cell), rather than its nucleus.

2018 Investment: \$50,000

Cumulative Investment: \$150,000

Initial Investment Year: 2017

Ryvit

Ryvit took part in the summer 2018 Ameren Accelerator where startups showcase new energy technologies and innovations.

Ameren Accelerator program - an innovative public-private partnership program - assesses, mentors and invests (upto \$100,000 in each firm) in energy-technology startup companies. The St. Louis Arch Angels first invested in Ryvit in 2017.

2018 Investment: \$650,000

Cumulative Investment: \$800,000

Initial Investment Year: 2017

2018 Follow-on Investments

Sequoia Sciences

In September 2018, Washington University researchers demonstrated Sequoia's lead compound SQ1274's efficacy in animal models of ovarian and uterine cancer. Scientists at Sequoia and AMRI worked together to optimize bifidenone, Sequoia's plant-derived anticancer compound which has been published in Journal of Medicinal Chemistry.

2018 Investment: \$150,000

Cumulative Investment: \$7,321,327

Initial Investment Year: 2006

SixThirty

SixThirty has raised \$7.2 million in April 2018 towards new startup investment fund. The money is part of a larger SixThirty fund that will enable it to increase the size of its typical investment from \$100,000 to \$250,000. In October 2018, Commerce Bank announced a multi-year partnership with SixThirty. Through its strategic relationship with SixThirty, Commerce will provide hands-on training and mentoring to the companies selected to take part in SixThirty's business development program. In December 2018, Allianz Life Ventures announced a strategic partnership with SixThirty to support innovative financial technology (FinTech) and insurance technology (InsurTech) startups.

2018 Investment: \$37,500

Cumulative Investment: \$1,700,000

Initial Investment Year: 2013

SixPlus

SixPlus introduced many new features in 2018. For restaurants, SixPlus added a client referral program which rewards restaurants with gift cards for providing client information to other places, in case the restaurant can't accommodate. The new "Message Client" feature provides additional communication between the restaurant and the client.

2018 Investment: \$25,000

Cumulative Investment: \$445,000

Initial Investment Year: 2015

2018 Follow-on Investments

SteadyMD

SteadyMD is the pioneer in concierge primary care. SteadyMD raised \$2.5 million in funding round led by Pelion Venture Partners. Funding will allow SteadyMD to accelerate its expansion and growth.

2018 Investment: \$50,000

Cumulative Investment: \$150,000

Initial Investment Year: 2017

Veniti

In August 2018, Boston Scientific Corporation signed an agreement to acquire Veniti for \$160 million. Boston Scientific currently owns 25 percent of the company through an earlier investment. The transaction price for the remaining stake consists of \$108 million up-front cash, as well as up to \$52 million in payments contingent upon FDA approval.

2018 Investment: \$3,655

Cumulative Investment: \$823,655

Initial Investment Year: 2011

Funded Companies to December 2018

ACTIVE (77)

<ul style="list-style-type: none"> • Acera Surgical • Adarza Biosystems • Agribody Technologies • Agvoice • Aisle411 • Apse • Aptimmune • Arvegenix • Bacterioscan • Benson Hill Biosystems • Boditrak Sports • Bonfyre • Canopy Biosciences • Cardiaform • Cardialen • CellAride • CheckTheQ • Cogno • Coolfire Studios • Elemental Enzymes • Elira Therapeutics • Endostim • Epharmix • Euclises Pharmaceuticals 	<ul style="list-style-type: none"> • Finlocker • Focalcast • Galera • Generico • Graematter • Greetabl • Gremlin • Hatchbuck • Immunophotonics • Island Radar Company • IV Diagnostics • Kalocyte • Katalyst Surgical • Kingdom Scene Endeavors • Kogent Surgical • Kypha • Lean Media • Life Equals • Lockerdome • MaxOne (Programax) • Mobius Therapeutics • Moleculera Labs • Nanopore Diagnostics • Nawgan • Neuroolutions 	<ul style="list-style-type: none"> • New Leaf Symbiotics (Trophomax) • Nexmatix (Aerovolve) • Pixel Press Technology • Plastomics • ProteoSense • Pulse Therapeutics • Radialogica • Rovermed • Rozzy Learning • Ryvit • S4 • Sequoia Sciences • SixPlus (BookaLokal) • Soozie's Doozies • SmashToast • StatRoute • SteadyMD • Summersalt (Lori Coulter) • SwipeSum • TrackBill • Transactly • Traxxsson • Tunespeak • Viosera Therapeutics
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OTHER INVESTMENTS (6)

CEASED OPERATIONS (9)

<ul style="list-style-type: none"> Capital Innovators Cultivation Capital Fin Tech Funds I Cultivation Capital Life Sciences Fund I & II Cultivation Capital Tech Fund SixThirty The Yield Lab 	<ul style="list-style-type: none"> Akermin (2016) Appistry (2017) Cervimark (2009) Edunn Biotechnology (2013) Epigenetx (2018) 	<ul style="list-style-type: none"> Gamerail (2008) Global Velocity (2017) Hirjo (2018) LangLearner (2013)
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EXIT (10)

<ul style="list-style-type: none"> Full (8) Confluence Life Sciences - Acquired by Aclaris Therapeutics Inc. (2017) Divergence - Acquired by Monsanto (2011) Gridlogix - Acquired by Johnson Controls (2009) Newsy - Acquired by E.W. Scripps (2013) Somark - Acquired by Two Oceans Pty (2013) SynerZ - Acquired by undisclosed party (2016) U.S. Spine - Acquired by Amedica Corporation (2010) Veniti - Acquired by Boston Scientific Corporation (2018) 	<ul style="list-style-type: none"> Partial (2) Clearent (2015) GainSight (2013)
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ST. LOUIS ARCH ANGELS

ONE METROPOLITAN SQUARE
SUITE 1300
ST. LOUIS, MO 63102

WWW.STLOUISARCHANGELS.COM