



Executive Summary

annual report

2023

VIC | **TECHNOLOGY™
VENTURE
DEVELOPMENT**



Introduction

Over the past year, remarkable accomplishments unfolded across our array of high-impact life science companies. Both our VIC Tech team and the teams of our portfolio companies exhibited great adaptability and tenacity to achieve significant progress during a year marked by a strong downturn in nationwide venture capital funding.

We saw our largest investment round ever into a portfolio company – a \$50M Series D investment into Calyxo in 2023. For many of our portfolio companies, VIC Tech and our affiliated VIC Investor Network (VIN) played important roles in bridging funding gaps. Our portfolio companies also used non-dilutive funding sources. It was, in fact, an exceptional year for our companies in securing non-dilutive funding. This included several multi-million-dollar Phase II SBIR/STTR grant awards, multiple new Phase I awards, and various other non-dilutive funding grants. This success not only helped our portfolio navigate the challenging venture capital environment in 2023 but also contributed to minimizing dilution for VIC and VIN investors.

Our VIC Investor Network continued to demonstrate exceptional returns for its members. This included a realized 10X return on one investment and an IRR of 38% combined across all investments made since inception of the network in 2013. The IRR calculation includes both realized returns and estimated returns based on most recent investment round share prices. While the 38% combined IRR is down slightly from previous years, due in large part to the challenging investment climate in 2023, it still represents exceptional value growth for our VIN members.

We added a new VIC office in the Minneapolis-St Paul metro area which has a vibrant life science and medtech ecosystem. The area is often referred to as "Medical Alley" due to its concentration of medical device companies. It is a hub for medtech innovation and manufacturing, hosting major companies in the industry. VIC's presence in the region will facilitate identification of new medical innovation available for license, new strategic partner relationships, and new investment partners.

Appendix A provides the VIC financial summary and Appendix B contains more detailed updates on the progress for each company. The Appendices are confidential and are only available to VIC stakeholders. However, in this Executive Summary, we provide a high-level overview, and highlight a few of the noteworthy developments in 2023.

Mission

Form and grow life science companies that shape the future by bringing innovative discoveries from research labs to commercial deployment.

Albuquerque, NM | Boulder, CO | Dallas, TX
Fayetteville, AR (headquarters) | Minneapolis, MN

victtech.com | vicnetwork.com | vicfoundry.com

Board of Directors:

Chairman: Calvin Goforth | Jerry Adams | Fenel Eloi
Ajay Gupta | James Hendren | Laura Lyons | Chantell Preston



Leadership



Calvin Goforth
CEO



Michael Artinger
Executive VP
& Managing Dir.



Yun Li
Managing
Director



Ralph Henry
VP Life Science



Robyn Goforth
VP Biopharma
(VIC Foundry)



Xiaoli Su
VP Diagnostics
(VIC Foundry)



Mark Wagstaff
VP Operations



Kelli Pierce
Controller



Sierra Bergsgaard
Marcom Manager



Kelly Mabry
Executive in
Residence

2023

Portfolio Companies Progress Highlights

Therapeutics Portfolio

BiologicsMD is developing a family of biologic therapeutics for hair loss and bone disease. These are “smart” drugs that target the therapeutic to desired sites with higher efficacy, greatly reduced side effects, and much less frequent dosing requirements. In 2023, BiologicsMD made good progress including completing review and study of its preclinical efficacy data package. This study

made a direct efficacy comparison, with very favorable results, to a reference JAK inhibitor (ruxolitinib) in the gold standard animal model of alopecia areata and chemotherapy induced alopecia. The company also completed recruitment of a new scientific advisory board.

Neurexis Therapeutics is developing a safe and effective drug to protect brain cells in individuals who have experienced cerebral ischemia (loss of blood flow to the brain) caused by cardiac arrest, stroke, traumatic brain injury, and other conditions. In 2023, the Company had several noteworthy developments, including award of a 3-year, \$900K, Direct-to-Phase II SBIR grant from the National Institutes of Health which will evaluate the neuroprotective efficacy in multiple, validated animal models of ischemic stroke. Other recent activity includes publication in the prestigious journal Nature by company CSO and technology inventor, Professor Ulli Bayer, of groundbreaking research that could unlock new avenues for Alzheimer's disease and other brain disease therapies.



Alopecia

The Scope of the Problem



Androgenetic Alopecia

- Impacts up to 80% of males, with lifetime risk as high as 90% in Caucasians
- Impacts up to 50% of females



Chemotherapy-Induced Alopecia

- Impacts 65-85% of people receiving chemotherapy.
- 50% consider this the most traumatic aspect of the chemotherapy



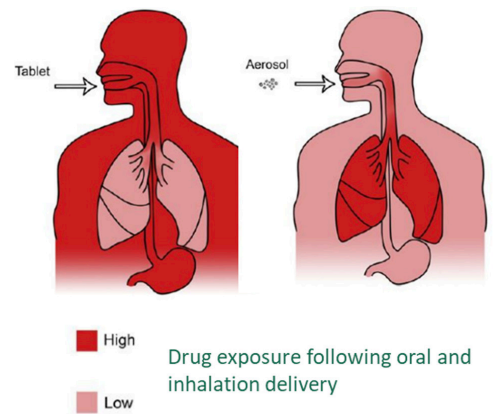
Alopecia Areata

- Lifetime risk of 2.1% for the overall population.
- Associated with anxiety, depression, and decreased quality of life
- 6.8 million patients in US



Neurexis Therapeutics lead product is a neuroprotective peptide to prevent brain damage following focal (stroke) and global (cardiac arrest) ischemia.

Spectacular progress was made by **Nob Hill Therapeutics** in 2023. The company developed its clinical device prototype dry powder nebulizer and initiated testing. A new SBIR Phase II grant for lung cancer treatment (in collaboration with Lovelace Biomedical) was awarded for \$2M. Nob Hill had a successful FDA Type C Pre-IND meeting that confirmed regulatory pathway and testing requirements for the DryNeb. The company also executed agreements with multiple strategic partners. There is an urgent need for a device that can deliver drugs to the lower respiratory tract, independent of the patient's breathing and lung capacity, and in larger quantities. The strong strategic partner interest in Nob Hill reflects that urgent need.



- Advantages of Inhalation Drug Delivery**
- **Direct Delivery of drug** to site of action.
 - **Lower dose** (compared to systemic delivery) to produce desired effects.
 - Minimizes **systemic adverse effects**.

Solaris Vaccines is developing vaccines based on a rapid, flexible, scalable, vaccine manufacturing platform for viruses, bacteria, and parasites. Work on an NIH NIAID contract to develop a SARS-CoV-2 vaccine using SolaVAX continued in 2023.

Much of the company's current focus is on transitioning from batch pathogen inactivation to a more scalable continuous flow approach to satisfy global demand. Solaris has been pursuing large grants and contracts from BARDA, CEPI, ARPA-H and other federal funding mechanisms to develop this higher throughput alternative, called VacciRAPTOR™. Preliminary assessment of the VacciRAPTOR method has been conducted and initial findings suggest effective inactivation of viruses at flow rates resulting in roughly 100,000 vaccine doses per hour of operation. Higher yields are likely with future enhancements to the system.

Examples of diseases without licensed vaccines

HIV Chikungunya Zika Marburg CMV Malaria Leishmania RSV

Examples of diseases with suboptimal vaccines

Influenza Tuberculosis Rubella Dengue Hepatitis B Ebola Yellow Fever

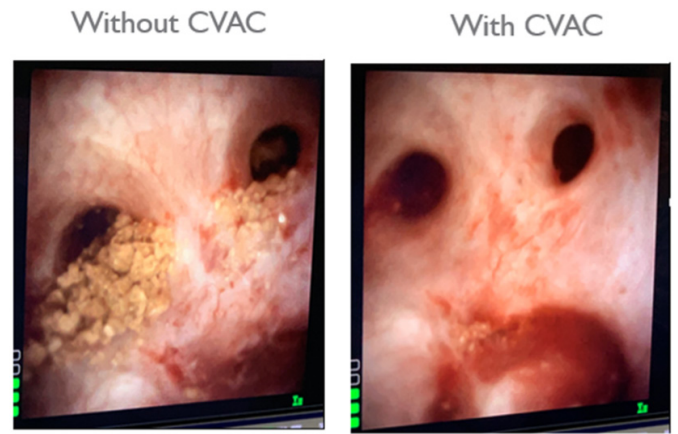
Diseases that we don't know about or don't yet exist?

SARS-CoV-3? New Influenzas? ?



Medical Devices Portfolio

Calyxo's first generation kidney stone removal tool, known as CVAC™, was used in over 1,000 procedures in 2023, exceeding the company's full year case and revenue goals. The company also closed a \$50M Series D financing round. A large stone burden study was published in the Journal of Endourology, a leading journal in the field of kidney stone disease. This study demonstrated the safety and effectiveness of CVAC Aspiration technology in patients with very large stone burdens. Of the 24 patients that had CT scans before and after the procedure, 96.1% (+/- 8.5%) of their stone volume was removed. Importantly, 19 of 21 patients who had been scheduled for staged ureteroscopy (i.e., two or more procedures) were completely treated in one procedure, thereby avoiding costly and burdensome follow-on procedures. A second generation CVAC System is in the final stages of development with 510(k) clearance expected in 2024. Clinician feedback has been overwhelmingly positive. CVAC 2.0 will transform ureteroscopy by streamlining the procedure, improving the usability of the device, shortening the learning curve, and expanding the appropriate patient population vs. the first generation CVAC.



Interior of kidney after laser lithotripsy was performed to break kidney stones (left), and after Calyxo's CVAC system was used to vacuum out stone debris (right).

SFC Fluidics is applying its patented drug delivery technologies to the insulin therapy adherence problem as well as other high impact therapies. SFC's high performance patch pumps offer convenience, discretion, and precision thereby allowing patients to lead active lifestyles. 2023 brought welcome advancement for SFC Fluidics for its products in development: the PANDA™ interoperable pump system and the GEMINI™ dual hormone delivery system. The company secured substantial additional funding that will take its PANDA interoperable pump system to 510(k) regulatory clearance, a critical milestone for SFC. The photo on the right, a fully working model of the PANDA pump with control by a smartphone-based app, includes improved and more robust technology components compared to earlier prototypes.



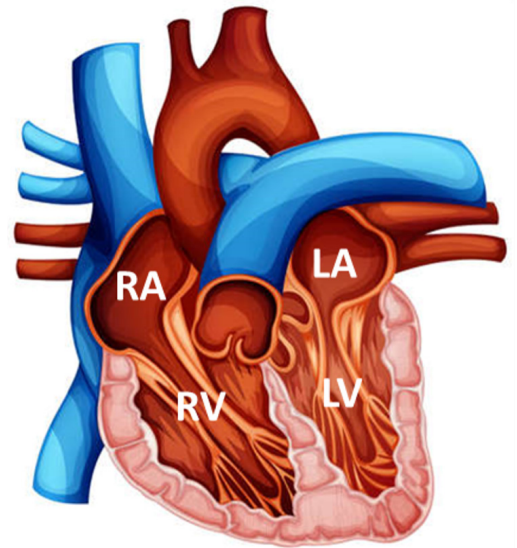
SFC Fluidics Panda Patch Pump

Solenic Medical's SOLA2 system provides non-invasive treatment for infected metallic implants in the body. This treatment addresses a major complication of various surgeries such as knee and hip replacements, as well as in trauma related implants such as plates and rods. Notable milestones were achieved in 2023. Early in the year, a \$5.6M Series A investment round was completed led by Johnson & Johnson Development Corporation (J&J's corporate venture capital arm) and syndicated with other VCs and angel investors. Subsequent major progress milestones included receiving outstanding initial bone histology and other data showing overall great bone health results from the company's final large animal trial. The SOLA2 was formally introduced in November at the American Association of Hip & Knee Surgeons Annual Conference.



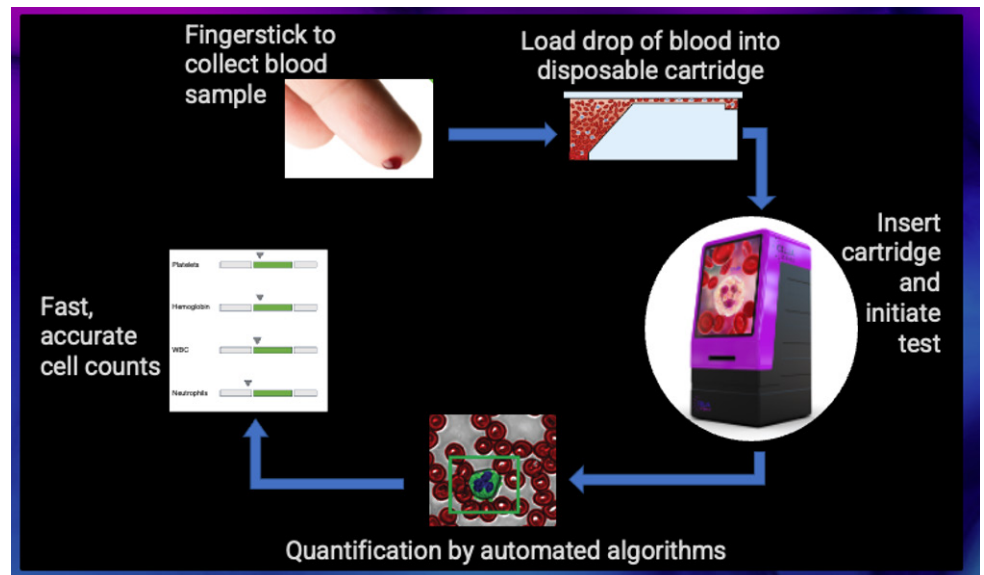
Diagnosics Portfolio

CardioWise's FDA cleared SQUEEZ™ machine-learning based heart analysis software for cardiac CT is a single diagnostic test that is able to provide quantitative analysis of the myocardium, arteries, and valves with an unprecedented level of detail. In the beginning of 2023, CardioWise concentrated on completing the verification and validation testing for a partnership arrangement with GE Healthcare. CardioWise will be using the GEHC support systems and resources available through the channel partnership to gain entry to both the US and EU markets. In parallel, CardioWise is building its own service and support programs to provide assistance to GEHC and other channel partners for commercialization. The company completed its second audit for the ISO 13485 audit in July, 2023. The next steps toward regulatory approval in the EU is to complete the CE mark and Medical Device Registration and the company's goal is to complete this process by the end of 2024.



CardioWise SQUEEZ™ machine learning based software is the first and only technology that can analyze heart wall motion in all four chambers of the heart.

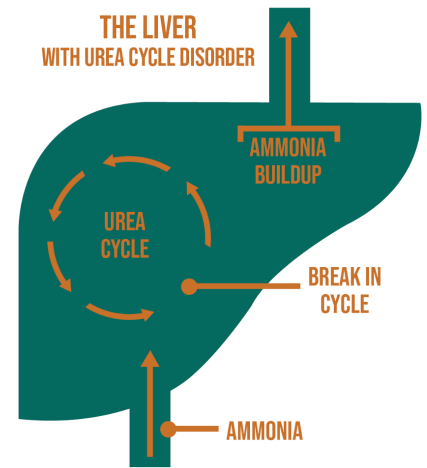
Cellia Science is developing a point-of-care hematology analyzer that will provide bedside complete blood cell counts (CBCs) for cancer patients. A major focus in 2023 was the adaptation of the company's microfluidic sample cartridge into a user-friendly product that can be manufactured at scale. Cellia also made progress on the instrument's analysis software. Additionally, the company is exploring other applications of deep-UV microscopy to expand the



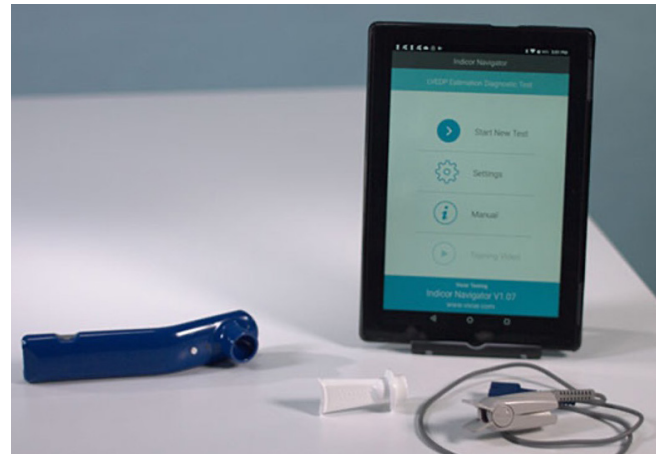
company's product pipeline and demonstrated that its technology can be used for real-time assessment of bone marrow aspirate adequacy. When implemented clinically, this will reduce the number of aspiration procedures that do not obtain sufficient material for diagnosis, reducing the need for additional procedures and speeding the time to diagnosis. Much of the progress in 2023 was funded by the NIH through a Phase I SBIR grant from NHLBI and a Phase I STTR grant from NIBIB, together totaling over \$600,000.



Enhance Diagnostics was formed in December 2023 to develop a breath test diagnostic platform suitable for at-home use. The initial focus is an ammonia test for individuals with chronic kidney disease (CKD) and urea cycle disorders (UCD). CKD affects a significant number of Americans each year, and monitoring these conditions at home is challenging, leading to suboptimal patient care, increased morbidity, and fewer clinician touchpoints throughout the patient journey. Similarly, UCDS, rare diseases hindering the conversion of ammonia into urea, require meticulous monitoring to prevent hyperammonemia. The need for an at-home test is particularly acute for UCD patients and that will be the beachhead market for the company. CKD will be the second market target with a series of other diagnostic tests based on the company's breath test platform to be launched in the future.



Vixiar Medical has developed an inexpensive, non-invasive, hand-held device, trade name Indicor™, for assessing elevated cardiac filling pressure and subclinical fluid congestion. Indicor can be used at the point of care in the hospital, home, physician's offices, nursing homes, or specialty clinics. The device is an alternative to more labor intensive, more expensive, invasive, or less accurate approaches and is designed to prevent hospital readmissions and improve clinical management of heart failure. A clinical trial, in support of a revised FDA application, was initiated at Johns Hopkins. To date, 110 subjects have been enrolled. Enrollment took longer than originally expected slipping the planned FDA submission from 2023 to 2024.



Vixiar Indicor Device – A Non-Invasive Device for Assessing Heart Failure Patients.

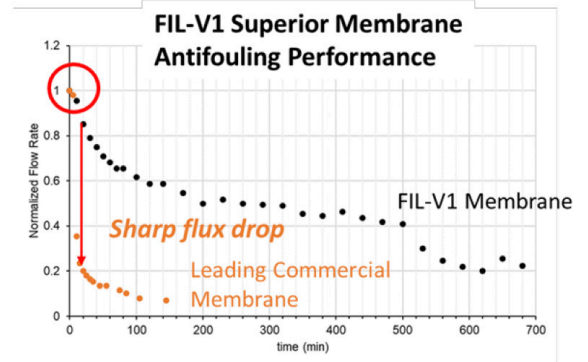
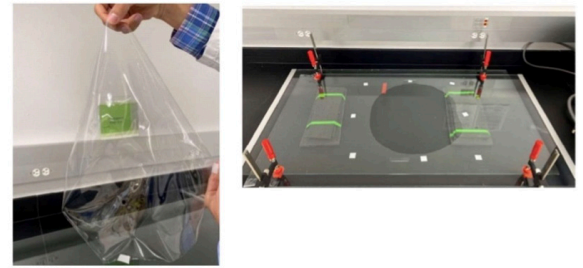
Materials, Food Safety, and Analytical Instrumentation Portfolio

Akeso Biomedical has developed a non-antibiotic animal feed additive, tradename CI-FER®, that has broad-based activity against pathogens. While CI-FER® is not an anabolic growth promoter, the improved gut health of the animals increases feed conversion efficiency and thereby reduces the production cost. The company has had some previous setbacks due to improper understanding of the needed dosage levels in some trials that

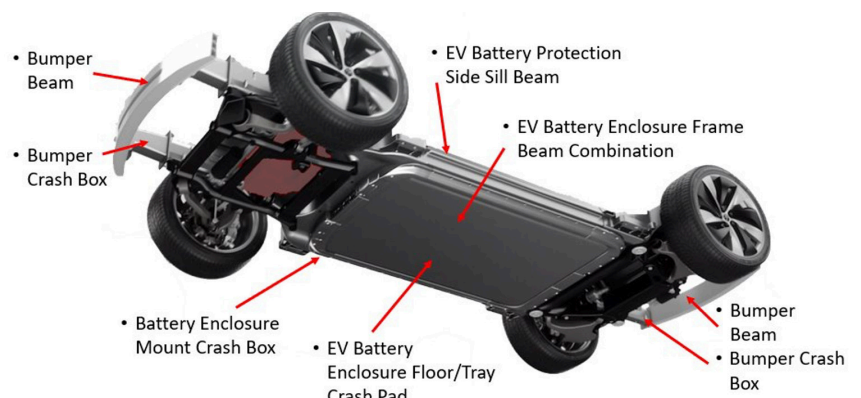


led to failure to close some strategic partnering opportunities. However, a new study demonstrated that, at the proper dosage level, CI-FER® provides consistently strong results. With those results in hand, Akeso has been seeking new strategic partners or acquirers and that effort continues into 2024.

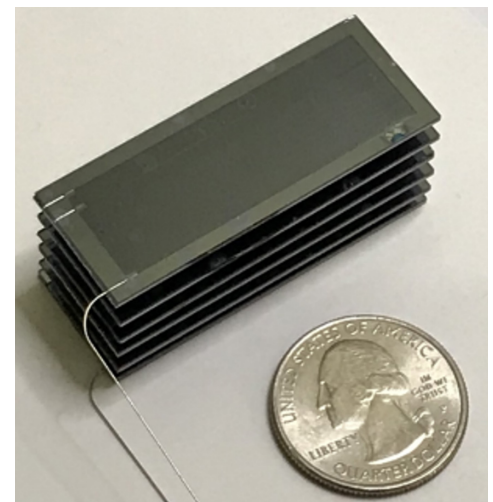
Filtravate is developing paradigm shifting ultrafiltration (UF) membranes manufacturing technology that enables membranes to be synthesized from monomer building blocks instead of polymer. The membranes provide for greatly reduced rate of fouling and consistently higher performance than currently available alternatives. Excellent progress was made in 2023. Filtravate established a facility at New Mexico Institute of Mining and Technology where the lead membrane product manufacturability, repeatability, and optimization have taken place. Filtravate was also awarded a two year \$450K grant enabling Filtravate to work with Los Alamos National Laboratory personnel to scale the manufacturing process. This scale-up process reduces the manufacturing capital investment needed and removes a potential roadblock for market adoption.



Tesseract Structural Innovations has a novel technology that absorbs more energy by weight than any other approach to absorbing vehicle crash energy or explosive device blast energy. In 2023, Tesseract worked with numerous potential customers and demonstrated the superior capabilities of the Tesseract Uniform Displacement Units (UDU) technology. These included global automotive companies, Tier-1 automotive suppliers, and newer EV-focused companies. Tesseract's UDU design for an EV battery compartment protection panel was validated with both dynamic FEA computer simulations and panel testing by an independent test lab (National Institute of Aviation Research in Wichita, KS).



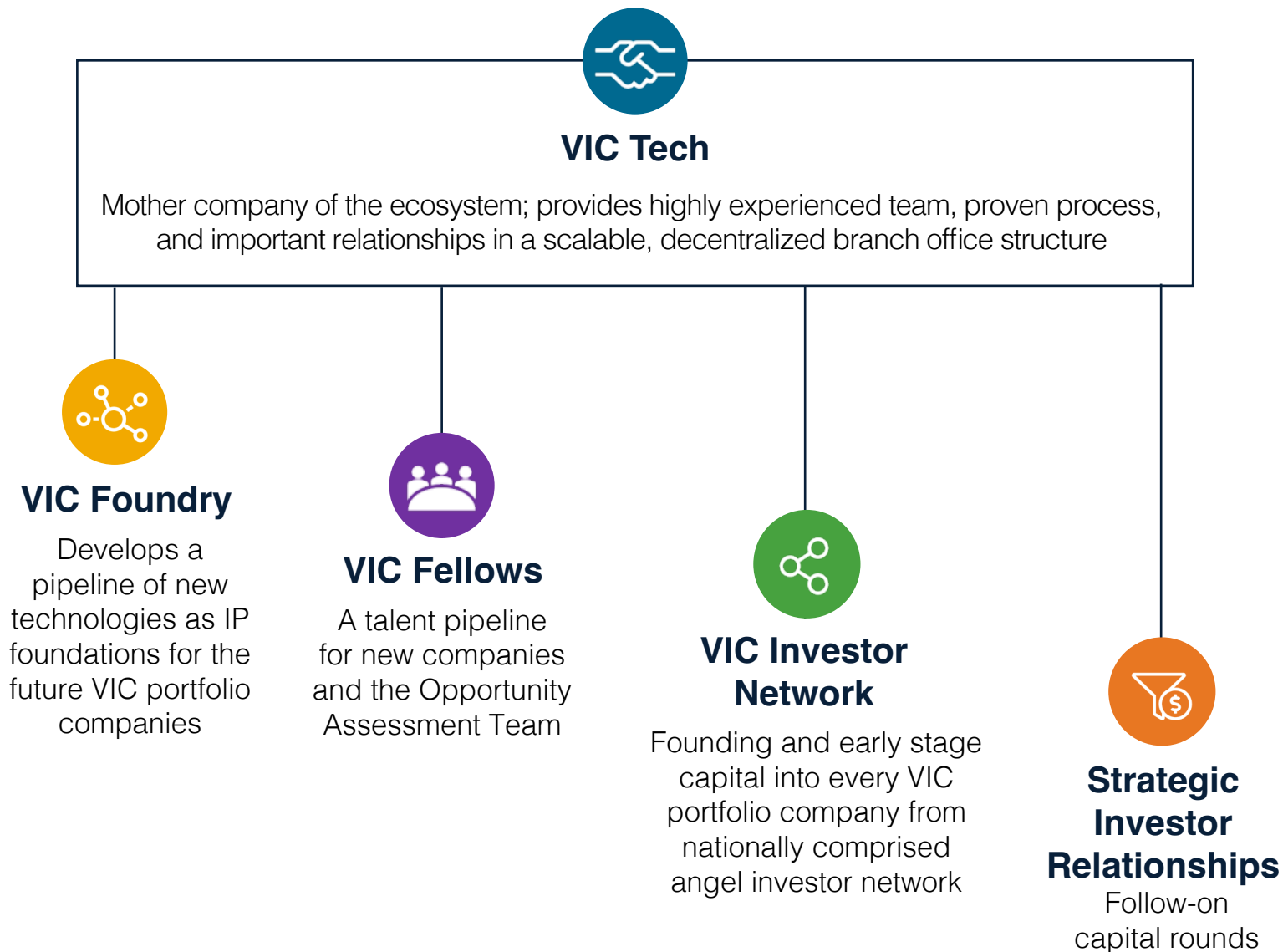
Zebra Analytix is developing microelectromechanical systems (MEMS) based miniaturized gas chromatography systems. Components include micro pre-concentrators (to concentrate limited amounts of sample into detectable levels), micro-separation cluster-columns (multiple MEMS columns combined in series), and integrated sensors (to detect the sample components). Advantages such as size, speed, portability, low cost, high performance, and low power consumption provide wide-ranging applications for the technology. A key achievement in 2023 was establishing and validating contract production of Zebra's cluster-columns that can provide full baseline separation of compounds – a capability which has not previously been achievable without the use of a mass spectrometer.



Zebra's novel cluster-columns feature microfabricated capillary columns that can be configured in vertical stack or planar array formats.

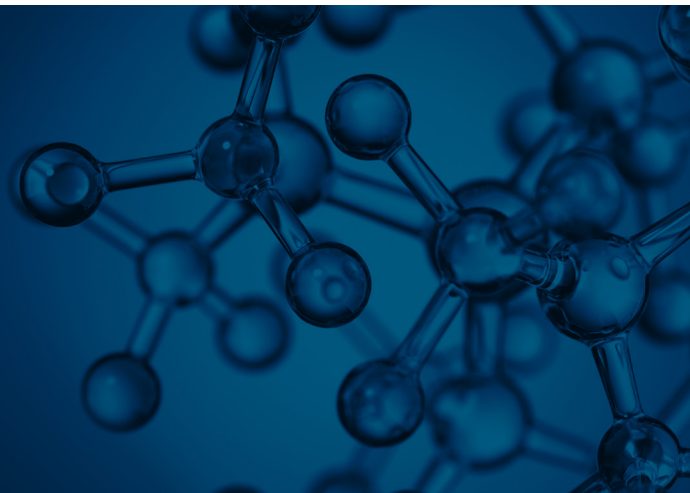


The VIC Innovation Ecosystem



VIC Tech (victtech.com)

In VIC Tech, the mother company of the VIC innovation ecosystem, we continue to expand our team with world class life science executive, strategic, clinical, and investor experience.

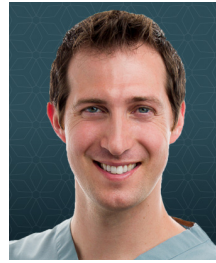


Medical Advisory Board Additions



Joshua Engle, MD

- CEO and Chief Medical Officer of ExciteMD
- MD from University of Southern California



Jonathan Gelber, MD, MS

- Integrative and Functional Sports Medicine at LA Orthopedics and Wellness
- MD from Icahn School of Medicine at Mount Sinai

VIC Foundry (vicfoundry.com)

VIC Foundry works with research partners at universities around the country and uses non-dilutive grant funding to advance life science technologies that have enormous potential impact but too many risks and unknowns to warrant private equity investment. The grant funding is used to de-risk the technologies, develop internal expertise in the specifics of the technologies, and position them to serve as the intellectual property foundations for new companies that VIC forms.

The Foundry is the newest element of the VIC innovation ecosystem. The first grant award received in the Foundry was in 2021 – a \$250K grant from NIH. In 2023, we had two active funded projects and a third project which is currently in the funding process. These grants total in excess of \$2.3M and each of the projects represent a good future new VIC company opportunity. The activity and number of active projects in the Foundry is expected to continue to grow rapidly.

VIC Fellows

The Fellows program continues to be a valuable talent pipeline for VIC and our portfolio companies as well as an important part of our technology identification and due diligence process. Our 2023-24 class of VIC Fellows came on board in June 2023 and provides diverse experience across therapeutics, devices, and diagnostics. Our 2022-23 Fellows Matt Leming and Alexandra Antonioli moved to Senior Fellow roles.



Sobha Pisharody, PhD

- Founder and CEO of GenoRx
- PhD in Molecular Oncology and Immunology from the New York University School of Medicine
- Experience in senior leadership roles at start-ups and large companies



Jonathan Rayner, PhD

- Associate Professor and Director, Laboratory of Infectious Diseases, University of South Alabama
- Founder Medical Countermeasures Consulting
- PhD in Microbiology from Colorado State University



Peter Sykora, PhD

- Director/Chief Scientific Officer Amelia Technologies
- Adjunct Professor at Georgetown University
- PhD in Human Molecular Biology from Deakin University



Gopesh Tilwala, PhD

- Senior Mechanical Engineer at Abbott
- Founder of Steeroflex
- PhD in Philosophy from UC San Diego Jacobs School of Engineering

VIC Investor Network



Founders Group Member

- Invests into every new VIC portfolio company at founding
- Lowest valuation, highest upside, longer time for first return
- Diversification by number of companies and industry sector
- Limited to 50 membership slots



Standard Group Member

- Able to invest in any investment round after the founding round
- Good valuations, high upside, opportunity for fast return
- Diversification by number of companies, industry sector and stage of development
- Unlimited number of membership slot

The VIC Investor Network (VIN) made six new investments into the VIC portfolio in 2023, bringing the total number of investments by VIN to forty-two since inception of the network in 2013. VIN had another significant exit event in 2023 – an optional share buyout at a 10x multiplier. Some members took the buyout while others stayed in for further value growth. The weighted average IRR across all investments made through the VIC Investor Network to date through December 31, 2023 is 38% based on most recent or current investment round share prices. While this is an outstanding IRR, it actually represents a modest decrease from previous years reflecting the downward pressures on valuations we saw in 2023. We anticipate maintaining this excellent IRR or possibly even increasing it in 2024. We will continue to further expand membership in the network nationwide.



Concluding Remarks

While, overall, 2023 was a year of excellent progress, the difficult funding landscape did significantly stretch out some timelines, interfere with potential exit opportunities, and keep us cautious on new company formation. Based on recent trends and investor discussions, we expect the funding landscape to improve in 2024. If that should indeed prove to be the case, we would anticipate forming at least two and up to four new portfolio companies in 2024. In our existing portfolio, we will continue to engage strategic partners and explore exit opportunities. At least three of our existing companies appear to have a good chance for nine-figure exit events within the next 2-3 years. Almost all of our portfolio companies are well-positioned for strong value growth and major new progress milestones over the same time frame.

VIC Tech takes pride in bringing innovation from the lab to the market that can have a substantial health impact while simultaneously reducing the burden of healthcare costs to an aging population. We take pride in our work and I am personally grateful to the dedicated VIC team and to the outstanding teams in our portfolio of high-impact life science companies.



R. Calvin Goforth
Chief Executive Officer