

A YEAR **LIKE NO OTHER**  
A RESPONSE **LIKE NO OTHER**

SCRA ANNUAL REPORT 2020

INVESTMENT  
FUNDING  
INNOVATION  
TECHNOLOGY  
PARTNERSHIPS  
MANUFACTURING  
COLLABORATION  
RESEARCH  
INDUSTRY 4.0  
DEVELOPMENT  
SOUTH CAROLINA  
FACILITIES  
CONNECTIONS  
ENTREPRENEURS  
STARTUPS  
MENTORING  
LIFE SCIENCES  
GRANTS  
JOBS



**SCRA**

South Carolina Research Authority

# FROM THE CHAIRMAN & EXECUTIVE DIRECTOR

Dear Friends,

As our cover states, 2020 was a year like no other. Still, our team, as well as our partner entrepreneurs, industries, academic institutions, economic development organizations, and many others, continued to fulfill our mission of fueling South Carolina's innovation economy. We invite you to read this annual report where you will learn about the swift actions we took in response to the global pandemic affecting all of us, personally and professionally. We provided an additional \$1.25 million in funding to help our companies produce solutions to fight the pandemic and also to shore up some of our companies that were negatively impacted by the economic downturn. In this report, you will find fascinating stories of innovation that speak to the resilience, flexibility, and creativity of our team and partners.

SCRA continues to implement and operate within its FY2020-2022 Strategic Plan, which outlines the high-level strategies for continued, long-term sustainability and impact for SCRA activities:

- Continue to build on the success of the SCRA-Academia Strategic Collaboration to stimulate additional economic growth in cooperation with Clemson University, Medical University of South Carolina, University of South Carolina, and South Carolina comprehensive universities and technical colleges
- Increase access to capital for South Carolina companies
- Expand the recruitment, growth, and retention of technology-based companies
- Optimize mission-driven revenue to ensure the sustainability of resources and services
- Cultivate legislative support to advance strategic priorities
- Drive operational excellence

The Strategic Plan and the SCRA Growth Strategy are designed to guide and highlight our support for each stage in business development from academic research to commercialization, from entrepreneurship to startup, and from startup to successful exit, all while also addressing the needs of our industry partners. Our state-of-the-art facilities provide the infrastructure and support to heighten the possibility of success during each of these stages.

Other highlights of the past year include:

- Our annual impact on the state's economy was \$952.4M in 2020.
- Acquisition of SC Launch, Inc., Portfolio Company, EnviroMix, by GEF Capital Partners, a private, global equity fund making investments in companies that promote resource efficiency and sustainability.
- Completion of SCRA's 20,000 square feet of laboratory and office space in the new 22 WestEdge facility and the occupancy of that space by Vikor Scientific.
- Successful launch of the South Carolina Business Incubator Association, which brings together the state's dozens of incubators to create an ecosystem that captures innovation from across the state and drives economic prosperity.
- Multiple success stories resulting from our COVID-19 Program such as Precision Genetics' rapid pivoting to provide COVID-19 testing within a matter of weeks and which now provides such services for major medical centers and others throughout the state and beyond.

Our successes are the result of the strong partnerships with others who share our vision of South Carolina becoming a top innovation destination. We appreciate their ongoing support of our mission to grow our state's innovation economy.

Read on for more details about 2020, a year like no other.

With appreciation,



A handwritten signature in black ink that reads "Don Herriott".

**Don Herriott**  
Chairman, SCRA Board



A handwritten signature in black ink that reads "Bob Quinn".

**Bob Quinn**  
Executive Director, SCRA



**“Because of SCRA’s rapid decision-making process that provided critical funding for us, we were able to pivot our operation early on and began processing COVID-19 test kits for health care facilities and providing test results within 24 hours of when samples were collected. We are now providing COVID testing to the six largest health care operations in South Carolina.”**

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**Nate Wilbourne**, Founder & CEO  
Precision Genetics, Inc.

## **EDITORIAL**

### **MANAGING EDITOR**

Adrian Grimes

### **GRAPHIC DESIGN**

Kelsie Davis

# A YEAR LIKE NO OTHER, A RESPONSE LIKE NO OTHER.

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As the cover reads, 2020 was a year like no other. The South Carolina Research Authority acted swiftly and effectively in its response to the global pandemic. The pandemic was declared mid-March, and SCRA immediately began devising a plan to help its Member and Portfolio Companies. The SC Launch, Inc. Board of Directors was intimately involved in the company review process and made the complex and immediate funding decisions. This annual report tells the stories of the great work being done by SCRA Member and Portfolio Companies, and how they are fueling South Carolina's innovation economy.





Image credit: Carolina Diagnostic Solutions

*Carolina Diagnostic Solutions develops remote monitoring devices that provide patient surveillance and drive virtual conversations to improve care.*

The \$1.25 million in COVID-19 response funding was in addition to the normal cycles of funding and support. It was distributed to companies in two major categories, those providing front-line COVID-19 solutions and those suffering from the negative financial impact brought on by the pandemic.

**Companies receiving funding to provide COVID-19 solutions were:**

- Blue Eye Soft (COVID-19 detection and diagnosis)
- Carolina Diagnostic Solutions (pulmonary self-monitoring tools)
- Citibot (citizen engagement solution)
- Elastrin Therapeutics (treatment of lung-related illnesses)
- Pure Aqua Solutions (destruction of pathogens including COVID-19)
- Precision Genetics (COVID-19 testing)
- Resiliency Technology, Inc. dba SHARPEN (mental health support for health care workers)
- Zylö Therapeutics (treatment of COVID-19 and other lung-related illnesses)

**Additional companies received investments to help them continue growing their operations in spite of the pandemic. These were:**

- ActivEd (Walkabout app promoting learning and physical activity)
- BandwagonFanClub (fan demographic reporting to elevate event experiences)
- Ellipsis Technologies (anti-fraud and other cybersecurity tools)
- Global Transplant Solutions (organ preservation products)
- PEC360 (patient experience software)
- REsimplifi (commercial real estate property search)

In addition to investing financially, SCRA was, and continues to be, involved in initiatives to help fight the COVID-19 pandemic. Staff members are serving on various task forces and committees with health systems and economic development organizations. Other SCRA-supported companies are providing solutions to the pandemic, including Modjoul, which developed an employee health screening platform, Humimic Medical and ZVerse, which are producing protective shields, and Vikor Scientific, which is providing respiratory pathogen testing. Lastly, SCRA is sharing COVID-19 resources online and through social media.



## ABOUT US

Chartered in 1983 by the State of South Carolina as a public, nonprofit corporation, South Carolina Research Authority (SCRA) fuels South Carolina's innovation economy through the impact of its four programs. SC Academic Innovations (SCAI) provides funding and support to advance multi-institutional, translational research and accelerate the growth of university-based startups. SC Facilities (SCF) offers high-quality laboratory and administrative workspaces for technology-based startups and academic institutions. SC Industry Solutions (SCIS) facilitates and funds partnerships between and among startups, industry, and academia. SC Launch (SCL) mentors and funds technology-based startups that may also receive investments from SCRA's investment affiliate, SC Launch, Inc.

Advanced  
Manufacturing  
and Materials



Information  
Technology



Life Sciences

## VISION

Our vision is for South Carolina to be a top innovation destination.



**We're humbled and thrilled by SCRA's belief in our mission and vision. This investment allows us to continue to grow our impact and footprint in the Lowcountry. Thank you to the entire SCRA team.**



Nick Black, GoodUnited Founder and CEO



## CORE VALUES

### Integrity

We employ the highest ethical standards, demonstrating honesty, transparency and fairness in every decision and action.

### Respect and Trust

We treat each other with dignity and equality to create a culture of inclusion.

### Stewardship

We use our resources responsibly.

### Courage

We manage risks and do what is right, even in the face of personal or professional adversity.

### Innovation

We apply creativity and resourcefulness to the challenges we face.

### Collaboration

We cultivate partnerships to achieve our mission.



## FUELING SC'S INNOVATION ECONOMY

South Carolina Research Authority is fueling South Carolina's innovation economy by supporting and funding:



### SC Academic Innovations

Providing funding and support to advance multi-institutional, translational research and accelerate the growth of university-based startups.



### SC Facilities

Offering high-quality laboratory and administrative workspaces for technology-based startups and academic institutions.



### SC Industry Solutions

Facilitating and funding partnerships between and among startups, industry, and academia.



### SC Launch

Mentoring and funding technology-based startups that may also receive investments from SCRA's investment affiliate, SC Launch, Inc.

# FY20 SCRA

## IMPACT METRICS

Fueling South Carolina's innovation economy isn't just our mission, it's central to everything we do. Each year, we work with the University of South Carolina Darla Moore School of Business to study our economic impact on the state of South Carolina. This section shows how SCRA is positively impacting South Carolina jobs, salary, and growth in the innovation sector. Because this sector is one that produces higher salaries and job resilience, SCRA is directly contributing to job creation and salary growth in South Carolina.



### **\$952.4M** SCRA FY20 ECONOMIC IMPACT

SCRA's impact on the South Carolina innovation economy was \$952,416,953 in FY20, an increase of **35% from FY19**. The innovation economy is defined as an economic environment that facilitates the production of ideas, knowledge, and information.



### **\$2.4M** GRANTS

SCRA awarded \$2,397,766 in funds for SC Academic Innovations, SC Launch, and SC Industry Solutions grants in FY20. Grants help advance research capabilities, commercialize technology, expand product offerings, fund relocation costs, and more.



### **78%** IN REVENUE

78% of all SC Launch Member Companies brought in revenue in FY20.



### **\$1.5B** CAPITAL

SC Launch companies have received a total of \$1,471,441,206 in follow-on funding since the program's inception in 2006, with **\$329,465,522 received in FY20** alone. Follow-on-funding is investment capital a company has received after initial financial support from SCRA.





## 5.3K JOBS

SCRA operations and programs supported 5,251 South Carolina-based jobs in FY20.



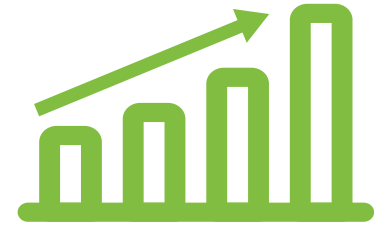
## \$74.2K SALARY

The \$74,196 average salary of companies in the SC Launch Program is 59% higher than the average state salary of \$47,182.



## 2.5X EMPLOYMENT MULTIPLIER

For every 10 jobs supported by SCRA, an additional 15 jobs are created elsewhere.



## +2%

## EMPLOYMENT GROWTH

South Carolina's employment in sectors defined as the innovation economy—including those sectors championed by SCRA—grew at a rate of 2% annually from 2017-2020, compared to 0.3% for South Carolina overall.



## 1.3M+ SQUARE FEET

SCRA owns and/or manages more than 1.3 million square feet of research, lab, collaboration, and office space.

## 50 COMPANIES

are located in SCRA facilities.

## 6 SCRA FACILITIES

are located across the state of South Carolina.



## \$9.9M

SCRA funding to support academic research, startups, and infrastructure in 2018-2020.



## 47 ACADEMICALLY AFFILIATED

companies currently supported by SCRA.

# 2020 YEAR IN REVIEW



## Best Places to Work

SCRA again ranked as one of the “Best Places to Work,” **for the tenth consecutive year.**

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## SCRA Strategic Plan & Growth Strategy

SCRA continued to implement its FY2020-2022 Strategic Plan and Growth Strategy. This plan identifies priorities for SCRA programs, Member and Portfolio Companies, and their access to capital, collaborations, legislative support, continuous improvements, and revenues.

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## SC Launch Company of the Year: ENGAGE Talent/Workforce Logiq

This Charleston-based predictive analytics and artificial intelligence (AI) software company is now part of the Workforce Logiq family, a leading company for talent acquisition, employee retention, and competitive insights to make smarter and faster workforce management decisions.

Some of the qualities of the Company of the Year Award are being broad, with a global reach, focusing on excellence, having a strong brand differentiation, and most importantly, having a unique product or service that is readily adoptable.

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## SC Launch Billboard Award: Boyd Cycling

Greenville-based Boyd Cycling, manufacturing high-quality carbon and alloy wheels, has become a leader in this industry.

Some of the qualities of the Billboard Awardee are introducing a breakthrough innovation with significant market impact, managing its innovative product or service and earning competitive distinction, and the ability to scale and grow in South Carolina.



## SC Launch, Inc. Portfolio Company Acquired by Global Firm

If there is an SCRA success story, EnviroMix, Inc. fits the bill. Its controlling interest was acquired by GEF Capital Partners (“GEF Capital”), a private equity fund making investments in companies that promote resource efficiency and that are building a more sustainable future. The water and wastewater solutions provider is an SC Launch, Inc. Portfolio Company.

EnviroMix became an SC Launch Member Company in 2009 and successfully progressed to receiving a Product Development Fund (PDF) Grant from SCRA in 2012 and two rounds of investments from SCRA’s investment affiliate, SC Launch, Inc., in 2011 and 2012. The company designs and manufactures innovative compressed gas mixing systems and process control technology primarily for the water and wastewater industry.

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## Caterpillar and Credo Software Form Partnership

In today’s manufacturing environment, real-time, actionable data and communications to your workforce are critical to safety, machine uptime, and productivity. SCRA’s Industry Solutions team formed a successful partnership with Caterpillar and small technology firm, Credo Software. Credo provided Caterpillar with technology to distribute real-time and area-specific information remotely. With a user-friendly interface and flexibility to accept a large variety of file formats, Credo’s solution, integrated with existing systems, produced valuable network efficiency and timely communications.

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## Global Transplant Solutions

Like many companies, this Spartanburg-based company was dealing with the effects of the pandemic. With funding and support from SCRA, they were able to pivot and succeed within the pandemic environment. Global Transplant Solutions (GTS) provides proprietary preservations solutions to maintain the quality of human organs during transport from donor to implant patient settings. During COVID-19 spike, medical centers would not accept their solutions because they were handled by FedEx and UPS. GTS used an SCRA grant to lease their own fleet of vehicles to directly deliver solutions to transplant centers. They began to thrive with increased market share and more personnel, and are moving to a larger facility.

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## Vän Robotics’ Smart Robot Tutor, ‘ABii’ Makes TIME’s Best Invention List

SC Launch, Inc. Portfolio Company, Vän Robotics, made TIME’s list of the best inventions for 2020. As stated by the magazine, “Every year, TIME highlights inventions that are making the world better, smarter and even a bit more fun.” Vän Robotics developed ABii, the Smart Tutor robot that personalizes every interaction, adapting to individual learning habits, and encouraging students to stay engaged, to ultimately build confidence and core skills mastery.



## SC ACADEMIC INNOVATIONS

Professor Srikanth Pilla, right, and Saeed Farahani at work in the Clemson University International Center for Automotive Research (CU-ICAR). Image credit: Clemson University

## Collaborating to Commercialize Technologies

SCRA works directly with academic institutions and affiliated startups, creating opportunities to advance research capabilities and commercialize technology.

- The South Carolina Medical Device Alliance (SCMDA) is a partnership, partly funded by a U.S. Economic Development Administration i6 Grant, among SCRA, Clemson, and MUSC that uses an accelerator model to advance early-stage medical device technologies towards commercialization. SCMDA has continued to accelerate the commercialization of medical technologies and build entrepreneurial capabilities among students, faculty, and clinicians despite closures due to pandemic. Over 24 students in engineering, business, and law from across the state have worked under the guidance of SCMDA's Commercialization Advisor to de-risk eight innovations. Now in its second year, SCMDA is advancing six nascent

technologies from Clemson, MUSC, and UofSC. A new collaboration with Clemson's School of Engineering allows graduate students to work with real-world inventions and enhances the SCMDA's efforts to advance technologies to the next inflection point. Outcomes to date include three patents filed, one Small Business Technology Transfer (STTR) grant application, two streamlined prototypes, five warm introductions for licensing opportunities, three business plans, and one investor pitch deck.

- SCRA-Academia Collaboration Team (SACT) Grants support multi-institutional, collaborative research teams that advance commercially relevant research, address key industry challenges, and foster the state's innovation economy. SCRA issued a new Collaborative Research Grant solicitation in FY20 with up to \$1.8M in funding available for research universities and up to \$900K for

comprehensive teaching universities and technical colleges. Research fields include Biomedical Sciences, Cybersecurity, and Industry 4.0. Grants will be awarded in Spring 2021.

- Maturation and Prototyping (MatPro) Matching Grants expand the impact of institutional funds invested in the maturation of a technology or the development of prototypes at SC academic institutions. SCRA awarded five MatPro Grants in FY20.

SCRA also provides mentoring and grant funding to academia-affiliated startups to guide them towards follow-on funding and technology commercialization.

- Academic Startup Assistance Program (ASAP) Grants provide seed funding to early-stage companies advancing academic intellectual property. SCRA awarded four ASAP grants in FY20.
- Small Business Innovation Research (SBIR) and STTR Matching Grants provide support to startups that have been awarded Federal SBIR or STTR Phase I Grants. These highly competitive grants support crucial activities that help position companies as strong candidates for Federal Phase II Awards. SCRA awarded six SBIR/STTR Matching Grants in FY20.



The neonatal feeding system includes bottle sleeve with trigger, stimulating unit, and infant-sized ear electrode.

Image credit: MUSC Foundation for Research Development

## Medical Device Alliance Technology Granted FDA Breakthrough Device Designation

One of the innovations supported by SCMDA is BabySTRONG (Stimulation of TRagus for Neuronal Growth). This technology, being advanced by MUSC's Foundation for Research Development, is a non-invasive and easy-to-use taVNS system to enhance feeding training in babies with feeding difficulties. BabySTRONG improves feeding without the use of a gastric tube, resulting in earlier discharge from the hospital. The Food and Drug Administration (FDA) granted a Breakthrough Device designation for BabySTRONG, signaling a path forward to commercialization for this device.

# ACADEMIC INNOVATIONS BY THE NUMBERS

## \$9.9M

SCRA funding to support academic research, startups, and infrastructure in 2018-2020

## 47

Number of academically affiliated companies currently supported by SCRA

## \$29.9M

Follow-on funding in 2018-2020 for grant awardees

## 15

Number of awards to academic institutions and academic startups in FY20

ACADEMIA

# SUCCESS STORIES



Professor Srikanth Pilla.  
Image credit: Clemson University

## Pilla Receives \$11M Award from U.S. Army

Srikanth Pilla, Jenkins Endowed Professor of Automotive Engineering and Founding Director of Clemson University Composites Center, received \$11M from the U.S. Army for his work on “Enabling Industry 4.0 for Multitiered Quality and Process Control in Precision Manufacturing of Composites.” In 2018, SCRA awarded an SACT Grant in the amount of \$100K to fund this project. Pilla’s work is important because it enables U.S. plastics and composites manufacturers to remain competitive in the global market by meeting ever-increasing quality requirements. Additionally, other manufacturing sectors, such as machining, metal forming, woodworking, and packaging, could easily use this research to better understand how Industry 4.0 technologies can be applied in their specific industry.

## Pensievision Earns Perfect Score from the NIH



SC Launch Member Company, Pensievision, earned a rare perfect score from the National Institutes of Health (NIH) on its grant application for developing a low-cost, handheld, 3D imaging system for improved screening of cervical neoplasia, to help prevent cervical cancer. The Charleston-based company develops AI-based, 3D medical imaging technologies. The grant funds awarded by the National Cancer Institute will be used for a clinical study, in collaboration with the University of California, San Diego.

## FUNDING OPPORTUNITIES: APPLIED RESEARCH



### SACT Collaborative Research Grants

Up to \$2.7M over three years

**Who:** Collaborative multidisciplinary teams involving SC academic institutions and industry

**When:** Current solicitation period is FY21-FY23

**Why:** To form research alliances among academic institutions to grow South Carolina’s economy



### Maturation & Prototyping Matching Grants

Up to \$15K

**Who:** SC public institutions of higher education

**When:** Request for applications released yearly

**Why:** To augment an academic institution’s maturation funds and expand development of technologies based on university intellectual property

# Elastrin Therapeutics Developing Novel Therapeutic for COVID-19 and Other Pulmonary Diseases



Elastrin Therapeutics, Inc. is developing technologies to restore hardened and damaged tissue using drug-loaded nanoparticles specifically targeted to degraded elastin fiber. Elastrin's patent-protected technology uses a unique, non-invasive approach to repair damaged

tissue with no negative side effects. Therapeutic targets include hardening of arteries, calcified heart valves, diabetes, and chronic kidney disease. Under the guidance of Elastrin's Chief Scientific Officer Professor Naren Vyavahare, Hunter Endowed Chair of Bioengineering at Clemson University and Director of the Bioengineering Center for Regeneration and Formation of Tissues (SC BioCRAFT), Elastrin's scientists have developed the first humanized antibody specific for damaged elastin.

SCRA has awarded \$125K in grants to Elastrin. SCRA's ASAP Grant of \$25K in 2018 was followed in 2019 by Elastrin's \$2.2M grant from NIH. That same year, SCRA awarded a \$50K SBIR/STTR Matching Grant to support activities that will position Elastrin to receive a Federal Phase II award. In 2020, SCRA awarded a \$50K COVID-19 Technology Grant to support Elastrin's work to develop a therapeutic for COVID-19.



Professor Naren Vyavahare. Image credit: Clemson University

In response to the pandemic, Elastrin pivoted to target damaged elastic fiber that leads to impairment of lung function. Many drugs being tested against the 'Inflammatory Storm' that sickens COVID-19 patients do not address the destruction of elastic fiber that is essential for air sacs and blood vessels to deliver oxygen and blood. Elastrin demonstrated pre-clinical Proof of Concept of interrupting that cycle, then repairing damage to the fiber in animals. Elastrin is testing in animal models and exploring partnerships with companies developing therapies for pulmonary diseases.

## FUNDING OPPORTUNITIES: STARTUPS



### SBIR/STTR Matching Grants

Up to \$50K

**Who:** Federal Phase I awardees

**When:** On a rolling basis

**Why:** To address critical gaps to obtaining Federal Phase II funding



### ASAP Grants

Up to \$25K

**Who:** Academic startups

**When:** On a rolling basis

**Why:** To develop technology and further research efforts from academic intellectual property

# SC FACILITIES



SCRA Applied Technologies Center, Summerville, SC

## Providing State-of-the-art Facilities to Startups and Academia

SCF continues its mission to provide high-quality space to South Carolina's startups and academia, while also responding to the pandemic. The SCF team manages SCRA's innovation centers located throughout the state of South Carolina. The centers are home to an array of tenants working in SCRA's areas of focus, advanced manufacturing and materials, life sciences, and information technology. Exciting innovation is happening in these state-of-the-art facilities that include wet labs, research areas, and

collaborative spaces. Tenants are working on projects that include COVID-19 testing and support operations, digital transformation technologies, advanced material technologies, AI technologies, and robotic manufacturing.

The SCF program is advancing technology, as well as growing and attracting technology-based companies to South Carolina.





L to R: Plastic Safety Shields at front desk, Infrared Cameras in lobby that accurately measures an individual's temperature.



## SC Facilities & COVID-19

The SCF team worked diligently to ensure the SCRA facilities are safe working environments during and after the pandemic. As the cases began to rise in South Carolina, the team went to work adding precautions so those tenants choosing to return to the facilities could do so safely.

The team made sure the SCRA facilities were safe to enter by implementing a comprehensive plan that included:

- Infrared cameras that detect body temperature at a distance and connect directly into the existing access security systems. These permanently attached systems send an alert to facility administrators should an entrant be outside of the Centers for Disease Control (CDC) temperature guidelines. Entrants who have temperatures higher than normal are not allowed to enter the facility. The systems are the first to be Underwriters-Laboratories and FDA-approved for accuracy in the US. Thermal imaging systems have also shown that they more accurately measure surface skin temperature than the typical forehead or oral thermometer that require a close distance or physical contact with the person being evaluated.
- Air purification devices have been installed in all the air conditioning systems, cleansing the air of any contaminants that may spread, not only the current COVID-19 virus, but other contaminants such as Legionnaires Disease, bacteria, mold, odors, and volatile organic compounds, using UV light and advanced oxidation plasma.
- CDC-recommended signage requiring face coverings, hand washing, and sanitization stations as well as social distancing guidelines are posted throughout each facility.

# SC FACILITIES BY THE NUMBERS

**>1.3M**  
**SQUARE FEET**

Total research, collaborative lab space, and office areas owned and/or managed by SCRA

**50**  
Number of companies located in SCRA facilities

**20K**  
Square feet of space leased by SCRA at 22 WestEdge

FACILITIES

# SUCCESS STORY



## 22 WestEdge

This new location in Charleston's Discovery District is now home to Vikor Scientific, an SCRA-supported company. Delayed by the pandemic, the ribbon-cutting ceremony was held in October. SCRA Executive Director, Bob Quinn, joined Charleston Mayor John Tecklenberg, MUSC Health CEO, Dr. Pat Cawley, and others to give remarks and celebrate the occasion. The SC Facilities team was recognized for all their hard work in preparing the world-class space for collaborative, market-driven research and commercialization.

Vikor Scientific specializes in infectious disease and oncology testing, but is also assisting with COVID-19 testing and processing. SCRA's leased space of 16,000 square feet of the building's eighth floor is being used for wet labs and offices for molecular diagnostics. An additional 4,000 square feet of the fourth floor is a customer service and logistics center to support Vikor Scientific's business operations.

Vikor Scientific started with two employees and now employs over 400 nationwide, with over 200 located in South Carolina.



“ I can't tell you how wonderful it is to have you all as partners! The SC Facilities team makes our lives so much easier here. Every issue we bring to you, even our last-minute requests, you resolve as quickly as possible. You all are an asset to SCRA and Vikor and I hope we have a working partnership for years to come. ”

Natalie Bruce, Logistics Manager, Vikor

# OUR SC FACILITIES



## APPLIED TECHNOLOGIES CENTER

SUMMERVILLE, SC

SCRA Applied Technologies Center in Summerville is a 10-acre facility at the junction of Exit 199 off I-26 and Highway 17-A. The property houses SCRA and Advanced Technologies International (ATI), Inc., employees.



## USC/COLUMBIA INNOVATION CENTER

COLUMBIA, SC

Designed to accommodate business offices and clean, next-generation manufacturing research operations. UofSC's McNair Center for Aerospace Innovation and Research is one of the tenants, co-located with SCRA operations in this facility.



## CAROLINA RESEARCH PARK

COLUMBIA, SC

Carolina Research Park is home to many technology-based companies including: SCE&G, BP Barber & Associates, South University, IKON, MISYS Health Care Systems, Ventyx, Holpack, Colite Industries, and others.



## DUKE ENERGY INNOVATION CENTER

ANDERSON, SC

This center is a LEED Gold-certified "green" facility developed in partnership with Clemson and Duke Energy. Tenants include Clemson researchers as well as academic startups.



## MUSC INNOVATION CENTER

CHARLESTON, SC

This Innovation Center has Biosafety Level II Laboratories to support medical and bioscience research and commercialization.

# SC INDUSTRY SOLUTIONS



## Solving Industry Challenges and Accelerating Growth

The SCIS team finished a strong year playing a significant role in pandemic solutions such as the ZVerse success story highlighted next in this report. Another example is the SCIS team's work with Contec, which was seeking to expand its cleaning agent sales into the compounding pharmacy market, but had very limited drug toxicity expertise. The SCIS team introduced Contec to a molecular modelling expert at MUSC and provided two Demonstration Grants, matched by Contec, to classify 236 drugs and 66 antibiotics based on hazards, allergic sensitivities, and spill decontamination. The research results are expected to significantly increase Contec's sales and will yield scientific journal publications.

The SCIS team engages industry leaders to understand their needs, then works to solve those challenges by scouting for technical solutions at startup companies or academic institutions. After identifying a potential solution, SCIS brings the parties together and, in many cases, provides funding and helps bridge the corporate and startup or academic cultures.

SCIS provides two types of grants. Demonstration Grants match a corporate contribution to provide a startup company or academic institution funds to demonstrate the readiness of a technology to meet industry needs. A successful Demonstration Grant provides a solution to a corporate problem and a growth opportunity for the startup or academic institution. Relocation Grants offset the costs associated with moving a technology-based company to South Carolina.



Smart PTO, the world's first ever fully electric, universal, power takeoff unit that eliminates the need for idling by utility trucks. This plug-and-play box will supply easy-to-access auxiliary power in just a two-day installation time. Image Credit: Viatec.

## Success Story: Viatec Inc.



Viatec Inc. continued its success in 2020 as a leader in the 'green energy' space. With another round of funding from SCRA's investment affiliate, SC Launch Inc., the Greenville-based Portfolio Company expanded its workforce to be able to conduct environmental testing that allowed them to improve their electrical power units to optimize for extreme conditions.

Viatec develops an affordable, green solution for commercial vehicles in the utility, telephone, construction, and delivery industries. The fully electric product, SmartPTO, is equipped to save fuel, reduce maintenance cost, and lower noise while commercial vehicles are idling. Through national partnerships, Viatec delivers these products in a modular, flexible, and scalable manner to meet customer needs.

Viatec is another textbook success story of how a concept, in partnership with SCRA, progresses from idea to being an investible company. Viatec was accepted as a Member Company into the SC Launch program in 2016 and received their first funding, a PDF Grant of \$15K in 2017. They received an Acceleration Grant of \$50K to complete the development of their SmartPTO technology. During the time, Viatec also received a \$260K grant from the North Carolina Clean Energy Technology Center.

Continuing to work with SCRA, specifically, the SCIS team, Viatec received a Demonstration Grant of \$45K with matching funds from an industry partner. Demonstration Grants provide the funds for a startup to provide a valuable solution to an industry partner which in turn, provides a significant growth opportunity for the small business, in this case, Viatec. The SCIS team also introduced Viatec to multiple venture capitalists for potential Series A funding.

# INDUSTRY SOLUTIONS BY THE NUMBERS

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## \$259K

SC Industry Solutions funding awarded for FY20

## \$457K

Matching commitments from industry partners for FY20

## 52

New SC-based jobs forecast in FY21-FY22

INDUSTRY

## SUCCESS STORY



Image credit: ZVerse, Inc.

### SCRA Portfolio Company Becomes Largest Supplier of Reusable Face Shields in the Nation

As businesses were closing due to the pandemic in March of 2020, Columbia-based ZVerse initially became concerned they would need to lay off staff, but instead, they made a bold step and shifted their operations.

ZVerse began using their CAD digital platform to produce reusable face shields, beginning with their in-house 3D print capabilities. While those early shields were functional and greatly appreciated, ZVerse became overwhelmed by the demand. They needed to go to injection molding and required quick tooling expertise to satisfy the mounting backlog of orders. To be able to respond to a million-unit demand, there were two critical problems to be solved. One

was identifying tooling and injection molding capabilities for a head band and the second was securing polycarbonate sheets for the clear visor component, both in scarce supply.

SCRA's SCIS team quickly identified an existing inventory of polycarbonate sheets at Blue Ridge Thermoforming in Greenville, sufficient to produce about 40,000 test visors. They also contacted Zentura LLC in Boiling Springs, which designed and produced an H-shaped die cutting tool that eliminated the concern of hole punches contaminating a surgical unit. Zentura also identified a company to custom make polycarbonate sheets, produced visor tooling in just three days, and delivered the first 1,000 visors within two



Image credit: ZVerse, Inc.

weeks. After receiving a ZVerse supply contract, Zentura quickly stepped up to supplying thousands per day; and by week 12, were making tens of thousands per day.

The rapid response by the SCIS team resulted in the delivery of millions of visors and helped ZVerse quickly respond to the needs of nurses and doctors while drastically expanding the size of its staff. **ZVerse is now the largest reusable face shield suppliers in the nation and has since invented a non-clinical inverted shield.**

“ SCRA has been a supporter of our company, since 2018. Within a matter of two weeks after the pandemic was declared in the U.S., they began developing additional support mechanisms to assist businesses like ours provide solutions in the fight against the pandemic. ”

**John Carrington**  
ZVerse, Inc. Founder & CEO

## FUNDING OPPORTUNITIES



### Demonstration Grants Various Amounts

**Who:** Early-stage companies and SC academic institutions

**When:** On a rolling basis

**Why:** Solve industry technical needs and accelerate growth of small companies and academia



### Relocation Grants Various Amounts

**Who:** Technology companies interested in relocating to South Carolina

**When:** On a rolling basis

**Why:** Attract companies capable of creating high-paying, technology-based jobs in SC

# SC LAUNCH & SC LAUNCH, INC.



Gabby Goodwin, CEO, Confidence by GaBBY Goodwin

## Supporting Startups through SC Launch

SCRA's entrepreneurial program, SCL, continued its mission of helping startups mature to the next level. They reviewed 52 companies in 2020 and accepted 13 into their program. Called Member Companies, they are now on the path to maturing and potentially receiving investments from SCRA's affiliate, SC Launch, Inc. as well as attracting funding from additional investors.

In addition to Year in Review features and the following success stories, some of SCL's Member Companies also deserving spotlight include:

- Confidence by GaBBY Goodwin, was accepted into the Fashion for Change incubator program, and received a \$10K grant. The program is a new initiative aimed at reducing barriers for entry for talent within the Black fashion community and furthering equal opportunity across the industry.

- tForm was classified as an essential business for packaging they produce to support the Department of Defense. As a provider of sustainable medical packaging, tForm was able to use their existing supplier base to quickly create personal protective equipment production capability during the first week of March 2020. tForm is continuing to provide support during this pandemic by supplying packaging for millions of testing kits and medical equipment.



**We are so grateful for SC Launch's investment of time, strategy, critique, and timely capital to take advantage of growth opportunities this year. Our sales have doubled during a pandemic, and our new partners and mentors have a lot to do with that.**



Rozalynn Goodwin, Founder and Co-Inventor  
Confidence by GaBBY Goodwin



- Pure Aqua Solutions received support from SCRA, which allowed them to increase their production of disinfecting products to 6000 gallons per day. They are now providing products to hospital facilities, schools, and meat-packing facilities.

- ActivEd, which developed an app called WalkAbouts to encourage learning and staying active, offered the app to school districts, at no cost, to assist students when schools closed due to the pandemic.

SCL provides startups with mentoring, access to a network of business experts and funding. Member Companies mature through the program and may be eligible for an investment from SC Launch, Inc. The program is open to qualified South Carolina companies in the advanced manufacturing and materials, information technology, and life science sectors.

To become an SCL Member Company, startups go through a comprehensive application and review process. Once accepted, startups receive mentoring and guidance from SCL program staff, connect to expertise in the Resource Partner Network, and participate in other learning and networking opportunities such as Launch and Learns and the Annual Summit. As Member Companies mature and demonstrate expertise and capability, they may be eligible to receive the following types of funding:

- PDF Grants assist startups with maturing their technology or finalizing their product, evaluating the potential for intellectual property, and market evaluations to define the best path to market.
- Acceleration Grants progress a startup towards commercialization and better position the company for an SC Launch, Inc. investment.

Member Companies that successfully progress through SCL's program may be eligible to enter the due diligence stage that may lead to an investment from SC Launch, Inc., SCRA's investment affiliate.



Pure Aqua Solutions uses a dry sprayer and a micro-aerosol technology, called Paerosol, to mitigate COVID-19 (Image credit: Paerosol)

## SC LAUNCH & SC LAUNCH, INC. BY THE NUMBERS

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### 133

Total number of current  
SC Launch Member  
Companies

### \$58.4M

Total amount of grants  
and investments to  
SC Launch Member  
Companies since  
inception in 2006

### 1.3M SQUARE FEET

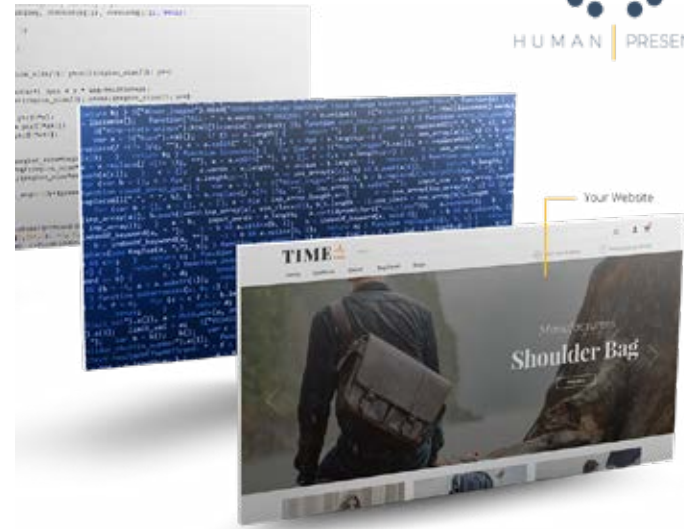
Amount of space  
occupied by SC Launch  
Member Companies  
across the state

# SUCCESS STORIES



## Human Presence from Ellipsis Technologies

Already a popular option for consumers, e-Commerce saw a boon during the pandemic year of 2020. Online shoppers transitioned from casual consumers to those buying necessities from the safety of their homes. This proliferation of e-Commerce also brings its fair share of online security risks. SC Launch, Inc. Portfolio Company, Ellipsis Technologies, is providing a safer way to shop. Their eCommerce security technology allows a website owner to invisibly detect human traffic while quarantining all suspicious visitors. The technology, called Human Presence, utilizes user timing and movement data coupled with a historical human behavior database and proprietary machine learning algorithms, thus eliminating the need for human website visitors to complete CAPTCHAs and other human intelligence tests to enter websites. Ellipsis also protects against form spam by identifying and blocking all spam bot attacks.



Ellipsis is a textbook example of a company entering the SC Launch program and successfully progressing through the program to receive investments. They were accepted into the program in 2015 and received their first investment of \$200K in March of 2016. Their continued growth and success positioned them to receive another investment of \$100K in 2019 and additional funding in 2020 to maintain operations during the pandemic.

## FUNDING OPPORTUNITIES



**Acceleration Grants**  
Up to \$50K

**Who:** SC Launch Member Companies

**When:** On a rolling basis

**Why:** To progress a company toward commercialization, and better position and prepare it for a possible SC Launch, Inc. investment.



**Project Development Fund Grants**  
Up to \$25K

**Who:** SC Launch Member Companies

**When:** On a rolling basis

**Why:** To assist a startup in achieving critical milestones. PDF Grants help startups mature their technology or finalize their product, evaluate the potential for intellectual property, and may lead member companies towards commercialization and increase their investability.



Precision Genetics offers three distinct services: a fully functional CLIA-certified laboratory, a turnkey solution to establish your own genetic testing laboratory, and an employer wellness platform improving the quality of outcomes for your covered employees. Image credit: Precision Genetics.

## Precision Genetics

The pandemic brought about many changes, good and bad, for companies. Greenville-based Precision Genetics pivoted from their normal operations of providing advanced molecular testing and other innovative solutions to health care providers in the state, to providing crucial broadscale COVID-19 testing.

Early in 2020, and as the pandemic was emerging in South Carolina, Precision Genetics began processing COVID-19 tests after receiving an Emergency Use Authorization from the FDA. An investment from SC Launch, Inc. allowed them to expand these services at a time when the state had a crucial need for additional testing capabilities. They were the first major COVID-19 testing lab outside of the SC Department of Health and Environmental Control, and were able to provide test results within a 24-hour turnaround period for health care facilities throughout the state. By the end of 2020, they were providing the testing for the

six largest health care operations in South Carolina. They also expanded their testing into a second site in Greenville. In addition to servicing health care facilities, Precision Genetics is supporting the employer health industry through contracts with Boeing, Michelin, Milliken, freight companies, and nursing homes along the east coast. Because of Precision Genetics' track record, SC Launch Inc. provided a \$250K investment to help them provide critically needed COVID-19 testing services to help our state fight the pandemic.

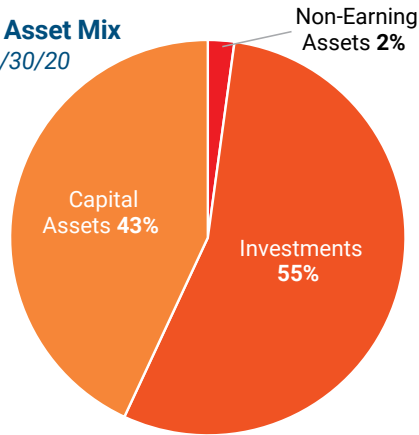
Outside of COVID-19 testing, Precision Genetics uses health care data to determine risks associated with medications and drug regimens. By combing genetic markers, molecular data, and clinical evidence, the company enables providers to develop individualized treatment and prevention plans for patients.

# SCRA FINANCIALS

## Statements of Net Position as of June 30, 2020 and 2019

As a public nonprofit organization, SCRA provides detailed reporting on all financials. The following is a summary of SCRA's financial position at the end of Fiscal Years (FY) 2020 and 2019.

**SCRA Asset Mix**  
as of 6/30/20



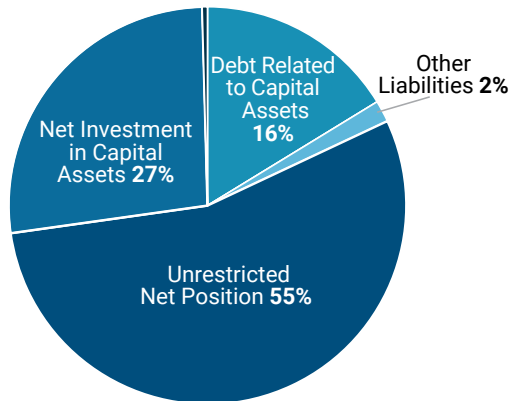
### ASSETS

	6/30/2020	6/30/2019
Non-Earning Assets	\$1,778	\$1,550
Investments	45,036	49,582
Capital Assets	35,404	32,923
<b>Total Assets</b>	<b>\$82,218</b>	<b>\$84,055</b>

(in thousands)

The increase in capital assets generate revenue through leases.

**SCRA Resources Mix**  
as of 6/30/20



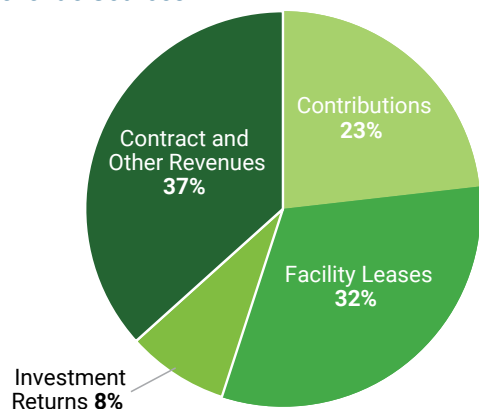
### RESOURCES

	6/30/2020	6/30/2019
Debt Related to Capital Assets	\$13,370	\$14,292
Other Liabilities	1,437	1,387
Unrestricted Net Position	45,029	46,736
Net Investment in Capital Assets	22,034	18,631
Restricted Net Position	348	3,009
<b>Total Resources</b>	<b>\$82,218</b>	<b>\$84,055</b>

(in thousands)

In FY20, the unrestricted net position of SCRA represented 55% of total resources, while debt related to capital assets declined 6% from FY19, and the restricted net position was 88% lower than the previous year.

## FY20 Revenue Sources



## REVENUE SOURCES

	FY20	FY19
IPF Contributions	\$2,934	\$1,900
Facility Leases	4,024	3,607
Investment Returns	1,055	1,656
Contract and Other Revenues	4,637	5,087
<b>Total Revenues</b>	<b>\$12,650</b>	<b>\$12,250</b>

(in thousands)

SCRA fulfills its mission of fueling the innovation economy of South Carolina by prudently deploying the resources made available through contributions to the Industry Partnership Fund (IPF), revenue from facility leases, returns generated from investments, contracts, and other revenues. Revenue mix in FY20 shifted modestly compared to FY19, as increases in contributions and facility lease revenue offset declines in investment returns, contracts, and other revenues.



## IPF CONTRIBUTORS

SCRA thanks the organizations below for contributing to the IPF, at the following levels:

### Diamond - \$200,000+

- Blue Cross Blue Shield of South Carolina
- Comporium, Inc.
- Home Telecom
- Alerion Ventures
- Southeastern Freight Lines, Inc.

### Platinum - \$150,000-\$199,999

- Dominion Energy Southeast Services, Inc.

### Silver - \$50,000 to \$99,000

- Carolina Arrhythmia Consultants, PA

### Bronze - \$10,000-\$49,999

- Charleston Thyroid Center, LLC
- EMABS LLC
- EXEQUEO
- JH Jones, Inc.
- J. Musselman Construction, Inc.
- Contec
- McCay, Kiddy & Associates, LLC
- Naramore Construction, Inc.
- xPain Specialists of Charleston, PA
- Swenson & Associates PA

# LEADERSHIP

## SCRA Board of Trustees

### Executive Committee

The SCRA board of trustees' executive committee is comprised of the presidents of Clemson University, the Medical University of South Carolina, and the University of South Carolina; the South Carolina governor or designee (to serve as Chairman); an additional appointee of the governor; the chairman of the South Carolina House Ways and Means Committee or designee; the chairman of the South Carolina Senate Finance Committee or designee; and two additional members.



**Mr. Don Herriott**  
SCRA Board Chairman  
Entrepreneur and Business Owner



**Dr. David J. Cole**  
President  
Medical University of South Carolina



**Dr. L. Fred Carter**  
President  
Francis Marion University



**Hon. Jason T. Elliott**  
Representative, South Carolina  
House of Representatives  
Attorney, Jason Elliott Attorney at Law, LLC



**Mr. Robert Caslen**  
President  
University of South Carolina



**Ms. Lou Kennedy**  
President, CEO and Owner  
Nephron Pharmaceutical Corporation



**Dr. James P. Clements**  
President  
Clemson University



**Hon. Nikki G. Setzler**  
Senator, South Carolina Senate  
Attorney, Setzler & Scott, P.A.



The SCRA team are committed to exceptional tenant services. They were front runners on the measurements and communication for the safety of their team and tenants during the COVID-19 Pandemic. What a gem!



Patricia C. Zahn, Director, Aeterna Zentaris Inc., Administrative Services

## Board Members

**Mr. Gregory (Gregg) B. Askins, Esq.**  
Attorney, Askins, Chandler & Askins, LLP  
Chairman, South Carolina Board of Technical  
and Comprehensive Education

**Mr. Bryant G. Barnes**  
President and CEO, Comporium Communications

**Mr. James E. Clark**  
President, South Carolina State University

**Ms. Jill Davis**  
Senior Vice President, Strategic & Ancillary Services,  
BlueCross BlueShield of South Carolina

**Dr. Linda M. Distlerath**  
Principal, Bamberg Advisors, LLC

**Mr. Peter G. Dunphy**  
CFO, Global Services & Solutions, Michelin North America, Inc.

**Ms. Jo Watson Hackl**  
Attorney, Wyche, P.A.; Author

**Mr. Robert W. (Wes) Hayes Jr., Esq.**  
Attorney and Chairman, South Carolina Commission  
on Higher Education

**Sec. Robert (Bobby) M. Hitt III**  
Secretary, South Carolina Department of Commerce

**Ms. Heather Simmons Jones**  
Principal, Breakwater Development & Advising

**Dr. Vahid Majidi**  
Director, Savannah River National Laboratory;  
Executive Vice President, Savannah River Nuclear Solutions

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**Ms. Krista L. Newkirk**  
Chair, Council of College Presidents; President, Converse College

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**Ms. Sue-Ann (Susie) G. Shannon**  
President and CEO, South Carolina Council on Competitiveness

**Mr. David M. Smalls**  
Legislative Director, Colleton County Legislative Delegation

“ SCRA has supported us from the very beginning and we can’t thank them enough. They believed in our people, mission, and methods. They took the time to listen and understand our short- and long-term vision.

Jack Neil, MD, Hank AI CEO

”

# SC Launch, Inc. Board of Directors

The SC Launch, Inc. is an independent, nonprofit corporation affiliated with SCRA. The board of directors approves loans and investments made to selected companies in the SC Launch program. The board, consisting of nine members, represents South Carolina's academic institutions and industry. They also have experience working with startup companies.



**Mr. Peter G. Dunphy**  
SC Launch, Inc. Board Chairman  
CFO, Global Services & Solutions,  
Michelin Americas



**Dr. W. Patrick Springhart**  
Vice President for Institutional Innovation,  
Greenville Health System



**Ms. Andrea Marshall, Esq.**  
SC Launch, Inc. Board Vice Chairwoman  
Innovation Director, Roper St. Francis  
Research and Innovation Center



**Mr. T. Stephen Thompson**  
Former CEO, Director and Founder of  
Genus Oncology LLC



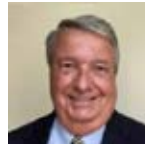
**Mr. Timothy Davis**  
CEO  
Advanced Care Management, LLC



**Mr. Michael Vang**  
Marketing and Business Manager,  
Industrial Biotechnology Sales



**Dr. Juliana (Julie) Iarossi**  
Clinical Assistant Professor UofSC Moore  
School of Business  
and CEO Coalesce Capital, LLC



**Mr. Stephen K. Wiggins**  
Executive Vice President and CIO,  
BCBSSC (retired); Chairman of the  
Board of Directors, IT-oLogy



**Ms. Patti Leahy**  
Vice President, Investor Relations &  
Innovation, Benefitfocus

“

From the beginning, SCRA was committed to accelerating the launch of our technology that supported their initiatives for our state, including innovation and job growth. They later helped us scale with growth capital, which is critical for any growing business. In short, we've benefited greatly from our relationship with SCRA and SC Launch, Inc.

”

Ted Jenkins, EnviroMix CEO



# SCRA Staff Leadership

SCRA is led by diverse leadership who each bring their own expertise to the table to accomplish SCRA's mission, fueling South Carolina's innovation economy.



**Mr. Bob Quinn**  
Executive Director



**Mr. Steve Johnson**  
Interim Director, SC Launch



**Dr. Nadim Aziz**  
Director, South Carolina Established Program  
to Stimulate Competitive Research  
(SC EPSCoR)



**Dr. Sohail Malik**  
Director, SC Academic Innovations



**Mr. Randy Cutts**  
Director, SC Facilities



**Ms. Yolanda Lewis**  
Director, Human Resources



**Mr. Cole Dudley**  
Director, SC Industry Solutions



**Mr. John Sircy, CPA, CMA, CFM, CSCA**  
Director, Finance and Administration



**Ms. Adrian Grimes**  
Director, Marketing and Communications



**SCRA has been invaluable to MIPY, LLC from an assistance, knowledge, and financial perspective. SCRA has provided unparalleled support that will never be forgotten.**



Chalbourne R. Brasington, CEO, MIPY, LLC

# SCRA Business and Science Advisory Boards

SCRA formed three Business and Science Advisory Boards (BSABs). The purpose of the BSABs is to advise SCRA's Board of Trustees when requested by it. The boards include representatives from South Carolina research universities, the venture capital/angel investment community, South Carolina Department of Commerce, and industry leaders in Biomedical Sciences, Cybersecurity, and Industry 4.0

Each board provides key business and technical expertise, acts as an independent/unbiased sounding board for input on SCRA's program implementation and performance, and provides guidance to SCRA regarding funding opportunities.

## Biomedical Sciences

### **Ms. Kathryn Cole Becker**

Founder, Principal, Translational Science Solutions, LLC – Chair

### **Ms. Darralyn Alexander**

President, Reimbursement Strategies

### **Dr. Ibraheem Badejo**

Sr. Director, New Ventures, J&J Innovation Center

### **Mr. Larry Boyd**

VP, Product Development, Bioventus

### **Mr. Bob Brosnahan**

Vice President, Research & Development, DePuy Synthes Spine

### **Dr. Jeff Cain**

Director, AVX Corporation

### **Dr. Joseph Carson**

Chief Technology Officer, Pensievision

### **Mr. Bob Creeden**

Managing Director, UVA LVG Seed Fund & New Ventures

### **Dr. Phillip Davis**

VP, Regulatory Strategy (US), Blue Earth Diagnostics

### **Ms. Becky DeLegge**

Founder, Delegge Medical

### **Mr. Rich diMonda**

Commercialization Advisor, SC Medical Device Alliance

### **Ms. Erica Jackson**

Partner, FDA & Health Care, K&L Gates LLP

### **Mr. Bill Killough**

Attorney, Riley Pope & Laney, LLC

### **Mr. Sam Konduros**

President & CEO, SCBIO

### **Dr. Martine LaBerge**

Professor and Chair of Bioengineering and Executive Director of the Biomedical Engineering Innovation Campus (CUBEInC), Clemson University

### **Dr. Prakash Nagarkatti**

Vice President of Research, University of South Carolina

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Senior Vice President & Chief Investment Officer, Evening Post Industries

### **Mr. John Propst**

Program Lead, Verily (Google Life Sciences)

### **Ms. Amy Salzhauer**

Founder & Managing Partner, Good Growth Capital

### **Ms. Patricia Scheller**

CEO, Universal Men's Clinic and Executive Chair, Revere Life Sciences

### **Dr. Lee Sierad**

Founder and Chief Executive Officer, Aptus Bioreactors

### **Dr. Mike Yost**

Professor of Surgery and Vice Chairman of Surgery for Research at MUSC

## Cybersecurity

**Mr. Bill West**

CEO/Co-Founder, Ellipsis Technologies – Chair

**Mr. Brad Alexander**

Vice President & Chief Technology Officer,  
Immedion

**Mr. Wiley Becker**

Partner, Alerion Ventures

**Mr. Chad Britt**

Control Systems Manager, DSM Kingstree

**Mr. Jon-Michial Carter**

CEO & Founder,  
ChartSpan Medical Technologies

**Ms. Kim Christ**

Director of SC Tech and SC Cyber,  
SC Council on Competitiveness

**Ms. Laura Corder**

Managing Director, Office of Innovation,  
SC Department of Commerce

**Mr. Chad Hardaway**

Associate Director, Office of Economic  
Engagement,  
University of South Carolina

**Mr. Ralph Heredia**

Vice President, Business Development,  
Zipit Wireless

**Mr. Robby Hill**

Founder & CEO, Hill South IT Solutions

**Mr. Charles Johnson**

President of Cybersecurity, Corsica Technologies

**Mr. John LaCour**

Founder & CTO, PhishLabs

**Mr. Zack Moody**

Head of Global Information Security,  
AVX Corporation

**Dr. Daniel Noneaker**

Associate Dean for Research, Clemson  
University

**Mr. David Setzer**

CEO, Mailprotector

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Attorney, Riley Pope & Laney, LLC – Chair

**Mr. Wiley Becker**

Partner, Alerion Ventures

**Mr. Chad Britt**

Control Systems Manager, DSM Nutritional Products

**Mr. Alex Chalmers**

Founder, Material Capital Partners

**Mr. John Dampier**

Chief Financial Officer, Southeastern Freight Lines

**Ms. Suzanne Dickerson**

Director of SC Fraunhofer USA Alliance,  
SC Council on Competitiveness

**Ms. Cindy Dodd**

Global Purchasing Manager, AVX Corporation

**Mr. Jamie Fox**

Key Account Manager, Lean Manufacturing,  
Process Optimization and Industry 4.0, Bosch USA

**Dr. Ramy Harik**

Associate Professor Mechanical Engineering, Univ. of South Carolina

**Ms. Sara Hazzard**

President & CEO, SC Manufacturers Alliance

**Dr. Mark Alan Johnson**

Thomas F. Hash Endowed Chair in Sustainable Development and Director of  
the Center for Advanced Manufacturing, Clemson University

**Dr. Matthew Klein**

Managing Partner, Redrock Capital

**Mr. Nick Metrakos**

Solutions Consultant, ETQ

**Mr. Kevin Nadeau**

Founder and CEO, True Load Time, Inc.

**Mr. Dan Rundle**

Chief Executive Officer, Worthwhile

**Mr. Chuck Spangler**

President, S.C. Manufacturing Extension Partnership (SCMEP)



**SCRA**

South Carolina Research Authority