

FROM THE CHAIRMAN & EXECUTIVE DIRECTOR

We invite you to join us in this look back at the successes of 2022. As our cover states, providing access for South Carolina Research Authoritysupported startups, research and development teams, and industry partners is the result of SCRA's mission of fueling the state's innovation economy. This means access to additional staff, new jobs, higher salaries, technology-based solutions, more workspaces, and more significant research opportunities for the state. In fiscal 2022 alone, SCRA had a \$1.15B impact on South Carolina's innovation economy, supported 5.6K+ jobs throughout the state, and enabled over \$85 million in follow-on funding for SCRA- and SC Launch Inc.-supported companies. Since the inception of the SC Launch program in 2006, companies have received over \$2.6 billion in follow-on funding.

SCRA's funding and support provided access for one Member Company, 6AM City, to grow to 140 full-time iobs, with over 40 based in South Carolina, Another Member Company, Integrated Micro-Chromatography Systems, received a \$1 million grant from the National Institutes of Health/National Institute of General Medical Sciences to aid scientists in developing therapeutics and diagnostics for neurological diseases, including Huntington's Disease, Parkinson's Disease, and Alzheimer's Disease. This is just a snapshot of the success stories you will see in this report.

This report also highlights SCRA leading successful collaborations that are helping the manufacturing industry further digital transformations.

Other 2022 highlights include:

- Producing and hosting five educational webinars and 12 podcasts that spotlight the successes, challenges, and best practices of Member and Portfolio Company CEOs.
- Realizing a positive impact of our diversity, equity, and inclusion (DEI) plan on SCRA's pipeline strategy.
- Achieving the successful exits of SC Launch Inc. Portfolio Companies Green River Spirits and Global Transplant Solutions.

During 2022, we achieved success in the following strategies contained in the SCRA FY 20-22 strategic plan:

- Funding and supporting the work of our academic partners, who are solving industry's most pressing problems.
- Ensuring financial sustainability through contributions to the Industry Partnership Fund (IPF). investments in our SC Launch Inc. Portfolio Companies and successful returns from those investments, and tenant leases from our innovation centers and other facilities.
- Maintaining and growing successful and productive relationships with the South Carolina legislature and other stakeholders that enable SCRA's optimal performance.
- Recruiting additional venture capital sources into our state.
- Driving operational excellence through our continuous improvement teams and processes.
- Supporting our Member and Portfolio Companies with grants, coaching, networking, and SC Launch Inc. investments.

In 2022, we finalized the FY23-25 Strategic Plan, under which we are implementing strategies from the financial, customer. internal, employee, and legislative perspectives:



Chairman, SCRA Board

Financial

- Achieving the annual IPF contributions сар.
- Optimizing annual cash returns generated by the SC Launch Inc. company portfolio.
- Improving other economic drivers to outperform long-term inflation.

Customer

- Effectively advising and mentoring SCRA Member and SCI aunch Inc. Portfolio Companies.
- Developing and assisting grant recipients in becoming investible companies.
- Catalyzing collaboration among industry, entrepreneurial, and academic stakeholders.

Internal

- Streamlining customer interactions.
- Maintaining effective risk management.

Employee

Attracting and retaining the best available talent.

Legislative

Developing and implementing a legislative strategy.

We also want to extend our appreciation for our partners across the state who contribute to the IPF and collaborate with us to deliver comprehensive services to technology-based startups and translational research and development teams. They enable us to meet our mission every day.



Executive Director, SCRA



FROM THE SC LAUNCH INC. CHAIRMAN & EXECUTIVE DIRECTOR

Thank you for your interest in SCRA's investment affiliate, SC Launch Inc. We have the exciting responsibility of investing in the state's best and brightest technology-based startups. These startups are fueling the state's innovation economy through new hires, higher salaries, and technology-based solutions for today's greatest challenges.

We invite you to read stories about triumph and success that resulted from the hard work, commitment, and perseverance of these SC Launch Inc. Portfolio Companies.

As the cover states, 2022 was a year of providing access to growth. SC Launch Inc. invested in MitoChem Therapeutics, which subsequently gained access to an additional \$1.5 million to further its research in ocular aging diseases. We also invested in Elastrin Therapeutics, which subsequently closed a \$10 million funding round.

SC Launch Inc. could not have invested in these startups without contributors to the IPF. Your contributions helped provide the funding for SC Launch Inc. investments.

Other 2022 spotlights include:

- Green River Spirits and Global Transport Solutions successfully exiting and becoming Graduate Companies.
- Investments in Elastrin Therapeutics, LifeTagger, Bubble Paper, AICG, MitoChem, BILDIT, ScopeStack, New Forge, and TestedHQ.

We also want to thank our partners in South Carolina's entrepreneurial ecosystem who refer our services to startups that are on a strong growth track. These partners also collaborate with us to ensure our state's ecosystem provides the wrap-around services these startups need to continue growing our state's innovation economy.



Peter G. Dunphy
SC Launch Inc. Board Chair



Mithakil

Matt Bell SC Launch Inc. Executive Director

incredibly talented
group of people
with real-world
startup experiences
who have helped
provide guidance and
connections to enable
companies to be
successful."

Scott Pancoast, CEO
Zylö Therapeutics

EDITORIAL

MANAGING EDITOR
Adrianne Grimes

GRAPHIC DESIGN
Kelsie Davis



From the very beginning,
SCRA was willing to give
us a chance to prove
ourselves, and gave us
guard rails to follow
that helped keep us
accountable."

Laura Boccanfuso
Founder & CEO, Vän Robotics

ABOUT US

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

VISION

SCRA will be the leading catalyst in making South Carolina the first choice for technology-focused industry, entrepreneurs, and academics.



MISSION

Fuel South Carolina's innovation economy by accelerating technologyenabled growth of academia, entrepreneurship, and industry.

CORE VALUES

Integrity: We demonstrate honesty, transparency, and fairness in every decision and action.

Respect and Trust: We treat each other with dignity.

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 foster a culture of inclusion.



FUELING SOUTH CAROLINA'S INNOVATION ECONOMY

South Carolina Research Authority fuels South Carolina's innovation economy through the impact of its four programs.



SC Academic Innovations

provides funding and support to advance translational research and accelerate the growth of academic startups.



SC Facilities offers high-quality laboratory and administrative workspaces for technology-based startups and academic institutions.



SC Industry Solutions

facilitates and funds technology advancements and partnerships with industry, startups, and academic institutions.



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



South Carolina Research Authority's mission is to fuel South Carolina's innovation economy. Propelled by this mission, SCRA-supported startups and academic research and development teams achieved growth in several ways during 2022. They added staff, new jobs, increased salaries, worked in state-of-the-art facilities, and gained access to millions of dollars in funding for additional research and development. South Carolina's economic strength is due in part to SCRA's programs and services.

SCRA's DEI outreach is also having a positive impact on our pipeline strategies. SCRA staff are investing their time and resources in chamber of commerce programs around the state that are mentoring and growing minority-owned businesses. SCRA is also providing financial support to help sustain these initiatives, including programs at the Charleston Metro Chamber of Commerce and the Columbia Chamber of Commerce.

One 2022 success story is SCRA's collaboration and partnership that helped Benedict College win a matching grant (\$525,000 in federal funds matched with \$525,000 in local funding) from the U.S. Department of Commerce Economic Development Administration's Build to Scale Venture Challenge. The award will help the Columbia-based HBCU organize, launch, and operate a statewide investment accelerator program for underrepresented groups and minorities in the early stages of entrepreneurship. The accelerator is recruiting five startups in each cohort and will operate two cohorts per year, both for 12 weeks. Startup founders will work on business and value propositions and business modeling, connect with mentors, customers, and investors, and acquire fundraising skills to achieve business milestones.



Read on to see more stories celebrating the access SCRA's mission is providing to the state's best and brightest tech startups and research and development teams that are making South Carolina a fertile innovation destination.

We've had multiple rounds of funding from SCRA and some of those initial rounds of funding really helped determine what our entry-level product would be. One grant, in particular, was very pivotal for our success, and it was the COVID-tech grant. SCRA has been incredible with helping us take this thing to the next level as we release a nationally recognized commercial product and have been instrumental in walking alongside us down that path."

Amanda Clark, CEO, PulManage

TABLE OF CONTENTS

From the Chairman and Executive Directors	2
About Us	4
Access: Fueling the State's Innovation Economy	6
FY21 Impact Metrics	8
Year in Review	10
Programs	12-27
Academia	12
Facilities	16
Industry	20
SC Launch	24
Financials	28-29
Leadership	30-34
SCRA Board	30
SC Launch Inc. Board	32
Staff Leadership	33
SCRA Business and Science Advisory Boards	34

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's jobs, salaries, and growth in the innovation sector. Because this sector produces higher salaries and job resilience, SCRA directly contributes to job growth and salary growth in South Carolina.



\$1.15B SCRA FY22 ECONOMIC IMPACT

SCRA's impact on the South Carolina innovation economy was \$1,150,919,168 in FY22, an **increase of 14.7%** from FY21. The innovation economy is defined as an economic environment that facilitates the production of ideas, knowledge, and information.



\$4.75M GRANTS & INVESTMENTS

SCRA and SC Launch Inc. awarded \$4,747,000 in funds to Member Companies, SC Launch Inc. Portfolio Companies, and academic institutions in FY22. SCRA grants and SC Launch Inc. investments help advance research capabilities, commercialize technology, expand product offerings, fund relocation costs, and more.



SCRA Member Companies & SC Launch Inc. Portfolio Companies have received a total of \$2,328,673,024 in follow-on funding since the inception of SC Launch Inc. in 2006, with **\$85,231,818** received in FY22 alone. Follow-on-funding is investment capital a company has received after initial financial support from SCRA or SC Launch Inc.



5.6K JOBS

SCRA operations and programs supported **5,608 South Carolina-based jobs** in FY22.



\$81.1K SALARY

The \$81,111 average salary of SCRA Member Companies is **62% higher than the average state salary** of \$50,905.



\$24.5M FUNDING AWARDED

SCRA has provided \$24,528,374 in funding to support academic research, startups, and infrastructure (FY14-22).



2.6X

EMPLOYMENT MULTIPLIER

The innovation economy has consistently helped to improve South Carolina's overall employment growth rate. For every ten jobs created through SCRA, an additional 16 jobs are created elsewhere.



1.35M+ SQUARE FEET

SCRA owns and/or manages over 1.35 million square feet of research, lab, collaboration, and office space.

32 COMPANIES

are located in SCRA facilities.

6 SCRA FACILITIES

are located across the state of South Carolina.



164

The total number of active SCRA Companies. 114 are SCRA Member Companies, and 50 are SC Launch Inc. Portfolio Companies.



39 ACADEMICALLY AFFILIATED

companies are currently supported by SCRA.

202 YEAR IN REVIEW



Best Places to Work

For the twelfth consecutive year, SCRA ranked as one of the "Best Places to Work in South Carolina". Staff attended the awards ceremony and received the award in August at the Columbia Metropolitan Convention Center.



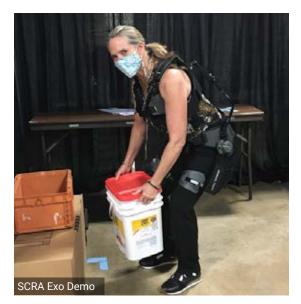
SCRA's Innovation Centers Bring a Diverse Group of New Tenants

We are continuing to help drive the innovation economy in our state by welcoming a diverse group of tenants from our research universities as well as founders from inside and outside of the state. In Charleston, the MUSC Innovation Center welcomed Precision Molecular Solutions, Verified Biosystems, and Vigilent Labs. At the USC Columbia Innovation Center, the USC College of Engineering is opening a digital twin test bed lab. Meanwhile, SiteLabs joined the Duke Energy Innovation Center affiliated with Clemson University. Our facilities serve as a place to support opportunity and growth for these and many other cutting-edge companies and researchers.



SCRA 2022 Annual Summit: Scale Up SC

The SCRA Summit returned in 2022 as an in-person event attended by over 200 people. SCRA Member and SC Launch Inc. Portfolio Companies, with ecosystem partners and supporters, participated in educational and networking opportunities. Company of the Year and Founders of the Year awards were presented to Precision Genetics and to Ryan Johnston and Ryan Heafy of 6AM City, respectively.



SCRA's Innovation with Exoskeletons

Exoskeletons (EXO) are an emerging wearables technology to reduce workforce fatigue and workplace injuries in manufacturing, logistics, construction, life sciences, and other industries. From industry requests, SCRA hosted an EXO demonstration (demo) at the South Carolina Manufacturing Conference with participants from 12 manufacturing companies to gain access to different EXO devices, reducing the cost and time of trials.

In this EXO demo, participants had the opportunity to try multiple EXO devices from five vendors that support the lower back or the upper extremities. SCRA worked with ASTM International's Exo Technology Center of Excellence to approximate an industrial setting for the trial. From the demo experience, JTEKT, a global automotive supplier, purchased two devices for a pilot in their manufacturing facility, and other industry partners have continued to evaluate EXO applications.



SC Launch Inc. Yields Significant Portfolio Company Returns

SC Launch had a successful year in 2022, as the program saw year-overyear increases in nearly all its program metrics. This is a direct reflection of the success of South Carolina's cumulative business ecosystems in their level of activity and sophistication in support of South Carolina startups. In addition, SC Launch Inc. had one of its best years ever in portfolio returns due to the success of companies like Global Transplant Solutions and Green River Spirits. From the proceeds of these exits, investments are being made in other South Carolina startups, some of which are highlighted in this report.



Clemson Media Forensics Hub Receives \$3.8 Million Grant

The Clemson University Media Forensics Hub, in the university's Watt Family Innovation Center, received a \$3.8 million grant from the John S. and James L. Knight Foundation. The hub was launched in 2020 with support from SCRA and the Watt Family Innovation Center. The grant will help develop solutions to fight online disinformation.



Ecosystem Alignment for Commercial Success

We coined 2022 as our 'year of alignment' because we can only successfully bridge the gap of development from startup to seed-stage investment by joining forces with our partners across the entrepreneurial support ecosystem. Our support focuses on a combination of grant programs and mentoring—providing strategic injection of nondilutive funding at key inflection points along the company's product development roadmap. These programs include the Academic Startup Grant and the Federal Matching Grant. However, these programs alone would be insufficient to launch most technology startups into the marketplace. This is why strong partnerships with the broader entrepreneurial ecosystem are so critical to

positioning South Carolina as the first choice for technology-focused industry, entrepreneurs, and academics.

In addition to supporting academic startups, SCRA also offers funding programs to academic institutions to advance development of their technology that enables academic engagement with industry. These programs include the Academic Matching Grant, SACT Grant, and our newest program, the University Strategic Alignment Grant. Since the inception of these translational research grants in 2017, SCRA has awarded over \$5.7M to South Carolina's colleges and universities.





Heartbeat Technologies team (left) and Heartbeat Technologies SAVER device (right).

Supporting Academic Startups Across the State

In 2022, SCRA accepted six new academic startups as Member Companies, including CarbonCents, Inc. and Heartbeat Technologies.



CARBONCENTS

CarbonCents Inc. is a spinout of Clemson University. This academic startup has developed a software-as-a-service platform that collects, measures, and presents data to enable decisions reducing emissions and energy costs through three modules: CarbonView, BuildingView, and SiteView. CarbonCents was incubated through the Clemson

Energy Visualization and Analytics Center (CEVAC) to implement sensors in over 32 buildings yielding over 190,000 daily observations. CEVAC is an ongoing joint effort between Clemson Facilities and the Watt Family Innovation Center. Their initial beta project with major industry partners, combined with mitigation measures, realized an estimated energy savings of 17 percent. CarbonCents works to elevate operations through the evaluation of energy efficiencies and providing access to carbon credits, while incorporating

student workforce development opportunities.



Heartbeat Technologies is a spinout of the Medical University of South Carolina (MUSC). This academic startup has invented The SAVER, a novel and easy-to-use device that can

be applied to the patient while CPR is being performed. The device aims to improve CPR outcomes from a dismal survival rate of only 9% for those in cardiac arrest by preferentially redirecting blood to key areas of the body, such as the heart and brain, to increase the chances of survival and reduce the potential for neurologic impairment. The SAVER improves CPR performance and confidence by increasing blood pressure in critical areas of the body coupled with real-time feedback on CPR effectiveness. The device can be deployed both in the field and in hospital settings and will ultimately be found wherever an AED is stored.

Other academic startups that were accepted as new SCRA Member Companies in 2022 include Glycopath, Apex Orthopaedic, Sodjourn MedTech, and Victory ExoFibres.

ACADEMIA BY THE NUMBERS

85

In FY22, SCRA managed 85 active engagements with researchers and academically affiliated startups

\$24.5M

SCRA has provided \$24,528,374 in funding to support academic research, startups, and infrastructure (FY14-22)

\$240M

SCRA support for academic research and startups has resulted in \$240,230,944 in followon funding (FY14-22)

SUCCESS STORIES

SCRA's Key Ecosystem Partners

Within academia, programs are aligned with the needs of our academic stakeholders to advance the commercial development of technology created by faculty and students. This would not be possible without our research institutions, particularly the technology transfer offices, as a key strategic partner. This includes the Clemson University Research Foundation (CURF), the University of South Carolina's (USC) Office of Economic Engagement, and MUSC's newly formed Zucker Institute for Innovation Commercialization.

MUSC announced in 2022 a bold new initiative that would strengthen



its efforts to develop and technologies. The recently established Zucker Institute for Innovation Commercialization

combines the strengths of two prior groups, the Foundation for Research Development (FRD) and the Zucker Institute for Applied Neurosciences (ZIAN). FRD was MUSC's technology transfer office,



which managed and promoted the intellectual property of MUSC for market adoption and improved health outcomes. ZIAN was a medical device accelerator that also sought market adoption for improved health outcomes. SCRA's academia team is enthusiastic about working with the Zucker Institute team and looks forward to further building on our longstanding partnership to support the launch of medical technologies into the public sphere where they can improve the quality of life for patients.

FUNDING OPPORTUNITIES: STARTUPS



Academic Startup Grant Up to \$25K

Who: Startups advancing intellectual property from institutions of higher education

When: On a continuous basis

Why: To support critical milestones towards commercialization and advance the

company's pursuit of follow-on funding



Federal Matching Grant Up to \$50K

Who: Recipients of Federal grants focused on technology

commercialization

When: On a continuous basis

Why: To support South Carolina-based startups that have received Federal grants (e.g., SBIR/STTR Phase 1) and are pursuing

additional Federal funding to further product development





Integrated Micro-Chromatography Systems, Inc., a USC startup, is an ideal representation of the

commercial success that can be achieved by spinning out of the university coupled with support from the entrepreneurial ecosystem in the Palmetto State. The Irmo-based startup creates, manufactures, and distributes next-generation biotechnology products for clinical and forensic toxicology organizations, academic research facilities, federal government agencies, and health science companies. IMCS was founded in 2013 by three scientists from USC. Andrew Lee, Qian Wang, and William Brewer utilized the resources from the USC/Columbia

Technology Incubator and USC's IDEA labs before moving into their state-of-the-art facility in Irmo. In addition to USC, IMCS has also engaged the research expertise of Clemson University to facilitate development of its product pipeline. IMCS has received support from SCRA's academia team, SC Launch, and SC Commerce's 3Phase program.



Access America's Seed Fund

3Phase is another key ecosystem partner that plays a critical role in helping South Carolina-

based startups in transitioning technologies from lab to market. A free service provided by the S.C. Department of Commerce's Office of Innovation, 3Phase helps South Carolina small businesses secure Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards. These federal awards are often the first source of non-dilutive grant funding to commercialize capital-intensive technology. 3Phase facilitates statewide training and workshops and works one-on-one with founders to help navigate the application process.

The academia team celebrates our newly accepted startups, grant awardees, and ecosystem partner successes in 2022. We are enthusiastic about how our "Year of Alignment" will position SCRA, our institutions, and our state's entrepreneurial ecosystem for sustained growth and repeated wins in 2023.

FUNDING OPPORTUNITIES: APPLIED RESEARCH



Academic Matching Grant Up to \$15K

Who: Institutions of higher education

When: Application closes May 30, 2023

Why: To support applied research sponsored by the institution



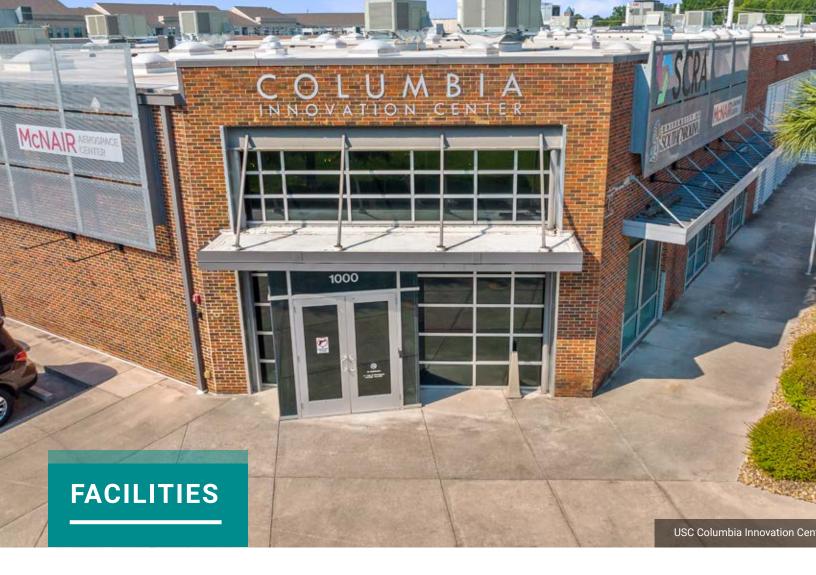
SCRA-Academic Collaboration Team (SACT) Grant

Who: S.C. researchers and their industry collaborators

When: Next RFA released in 2023; award cycle is three years

Why: To form multi-institutional research teams that are developing

innovative solutions to the key challenges facing South Carolina's industrial base. Grant are three-year awards



State-of-the-Art Facilities Advancing Innovation

Facilities continued its mission to provide high-quality space to South Carolina's startups and academia. The facilities team manages SCRA's innovation centers located throughout the state. The centers are home to an array of tenants working in SCRA's areas of focus: advanced manufacturing and materials, information technology, and life sciences. 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 molecular diagnostics and research, digital transformation, advanced materials, artificial intelligence, and robotic manufacturing.

The program is advancing South Carolina's innovation economy, as well as growing and attracting technology-based companies to the state.



Verizon 5G Innovation Experience Hub at the USC Columbia Innovation Center

In many instances, SCRA facilities are the only workspaces with the necessary amenities and features to accommodate cutting-edge innovation. The USC Columbia Innovation Center was recently selected to house a Verizon 5G Innovation Experience Hub in partnership with the University of South Carolina.

The hub aims to explore how 5G can transform industries, including health care, manufacturing, civil infrastructure, and others. Students, faculty, entrepreneurs, and corporate partners will be able to collaborate to test and create new solutions powered by Verizon 5G Ultra-Wideband, which is available in select areas.

Verizon included some of the solutions in their announcement, including improving manufacturing processes with quality sensing and defect detection, testing how 5G can enhance emergency response by enabling remote health monitoring and real-time analysis of patient vitals, and improving road and bridge condition monitoring using analytics and reporting. Verizon can also enable drone-based visual inspection of roads, bridges, and buildings using Al-driven computer vision.

Launching this innovation experience hub is part of Verizon's broader strategy to partner with enterprises, startups, universities, national labs, and government/military organizations to explore 5G capabilities and transformation potentials. Verizon is establishing other 5G innovation hubs across the country.

SCRA is great and makes things run very smoothly here. We enjoy this space as it is very well-equipped for our research needs."

Lillianne Harris-Wright, KOR Life Sciences

FACILITIES BY THE NUMBERS

1.35M+ SQUARE FEET

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

32

Number of companies located in SCRA facilities

6

Number of facilities

SUCCESS STORIES

Post-Pandemic Ready: Returning to an Office Environment

The SCRA MUSC Innovation Center is a state-of-theart research and business facility designed to support the sophisticated requirements of today's innovation economy. The Innovation Center was recently renovated to include additional single-occupancy offices and a conference room in preparation for businesses returning to an office environment. There are many advantages to calling the Innovation Center your business home.

At the MUSC Innovation Center, there is access to four conference rooms featuring whiteboards and Smart TVs for presentations and video conferencing. SCRA leases are all-inclusive, with wireless internet, utilities, and free on-site parking. Other amenities include card reader access, a shared breakroom, networked printers and copiers, 24/7 security monitoring, and an onsite police substation. In addition, all facilities are equipped with UL-listed automated infrared temperature cameras and air purification units with germicidal UV light that prevents the spread of pathogenic VOC, bacteria, and mold contaminants. These combine to provide better air quality and eliminate sick building syndrome.

The Innovation Center is located in Charleston's historic district with easy access to I-26, the Charleston International Airport, and Mt. Pleasant. With its proximity to MUSC, the Innovation Center provides a home for startup companies and emerging research, all within a two-mile radius.



The SCRA team has been so valuable to our corporation. Their communications are clear and concise. I have been unable to come into the office often and they have been more than understanding of all the situations and stay in consistent touch with me about my mail, etc. There are no words for how pleased I am with the team and our lease."

Patricia Zahn, Aeterna Zentaris Inc.

FACILITIES













22 WESTEDGE

CHARLESTON, S.C.

SCRA leases and manages 20,000 square feet of space in this class A office building, which is occupied by Vikor Scientific, with wet labs and offices for molecular diagnostics.

APPLIED TECHNOLOGIES CENTER

SUMMERVILLE, S.C.

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 Inc. employees, and others.

USC/COLUMBIA INNOVATION CENTER

COLUMBIA, S.C.

This center is designed to accommodate business offices and next-generation manufacturing research operations. USC'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, S.C.

Carolina Research Park is home to many technology-based companies including AECOM/BP Barber & Associates, Unitrends, Inc., SC Primary Healthcare Association, Pure Power Technologies, The Ritedose Corporation, Colite International, Pure Fishing, SC Thrive, DPX, and others.

DUKE ENERGY INNOVATION CENTER

ANDERSON, S.C.

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, S.C.

This Innovation Center has biosafety level II laboratories to support medical and bioscience research and commercialization, as well as business office space.



Industry Team Delivering Long-Term Impact and Sustainability

The 2022 focus for SCRA's industry team was identifying opportunities for high-impact, sustainable growth, and partners to build platforms to achieve that growth. These platforms leverage South Carolina's current assets while attracting national and international resources.

While continuing to identify solutions to challenges for individual corporate partners, the industry team worked with a group of corporate partners to identify common areas of need. One area is exoskeletons, where the industry team sponsored and organized demonstrations to try out exoskeletons from

the leading vendors resulting in corporate partners investing in exoskeletons. The industry team is investigating other technology areas to pursue.

Another area of significant impact was the success of working with state, regional, and local partners to relocate high-tech companies to South Carolina. These companies have robust growth potential, typically backed by experienced management, solid funding, and growing sales. They provide a base for high-paying jobs and for attracting additional capital investment.



Sustainable Soils are Profitable Soils

Reagrio is an innovative company providing solutions to three different climate challenges. The first is destroying per-and polyfluoroalkyl substances (PFAS), the second is restoring degraded soils, and the third is producing carbon-neutral energy.

PFAS, the eternal molecule, has been subject to thousands of lawsuits in the USA. With PFAS being a stable molecule for thousands of years, storing PFAS will be like storing nuclear waste. This means that the landfills may leak PFAS into our drinking water. Wastewater is made of biosolids, which will decompose in a landfill and emit greenhouse gases (GHG) unless they are fermented before being dumped into the landfills.

Reagrio turns biosolids into inoculated biochar. When the biochar is combined with microbes and mycorrhiza (fungal root), the resulting mixture helps restore degraded soils, improving the soil's capacity to hold water and thus absorb heavy rain and withstand drought, reducing the need for irrigation. It also benefits the improvement of microbial development in the soil, leading to improved crop quality and productivity as well as nutrients. In livestock management, biochar as a supplement reduces the livestock emission of GHG, helps improve the quality of the finished product, and increases the percentage of animals making it to slaughter.

Finally, Reagrio's process of producing biochar yields byproducts of steam and syngas, allowing for considerable carbon-neutral electricity generation.

INDUSTRY **BY THE NUMBERS**

\$250K

Industry funding awarded for FY22

\$283.8K

Matching commitments from industry partners in FY22

238

New SC-based jobs forecast in FY22-FY24



SCRA Member Company Applying Predictive Maintenance A.I. Technologies to Industry Partners



IoTco, an SCRA Member Company, collaborated with TRANE Technologies to implement predictive maintenance A.I. technologies in their Columbia, S.C. plant on critical assets and components,

including press machines, motors, and fans. Continuously monitoring manufacturing assets through predictive maintenance led to a much greater understanding of the true "health" of each asset and predicting and diagnosing failures before they occur. This not only improved key plant metrics like overall equipment effectiveness but also improved mean

time between failure, mean time to repair, and overall labor efficiency and scheduling of maintenance resources. All in all, it established a library of asset templates that are scalable across the global TRANE manufacturing footprint to shorten the time to value.

IoTco provides a turnkey approach to Think Big, Start Small, and Win ROI with A.I. and Predictive Analytics. By utilizing a library of solution templates for a variety of critical asset types, manufacturers can rapidly deploy Predictive Maintenance (zero downtime) and Predictive Quality (zero defect) use cases on the plant floor.

Thanks to the collaboration with SCRA, we were able to support the project with TRANE Technologies. They were a catalyst to bring us in as an emerging technology for the state of South Carolina and introduced us to TRANE technologies."

Mo Abuali, Managing Partner, IoTco

Zero-Defects: Manufacturing at VOITH with A.I. and Predictive Quality

Using predictive analytics within a smart factory is usually geared towards uptime improvements, minimizing spare parts inventory, improving maintenance and labor, scheduling activities, etc. However, predictive analytics can also detect, predict, and reduce waste and scrap in the manufacturing sector.

Predictive quality is a crucial concept. Predictive quality solutions deploy A.I. and machine learning techniques to detect, diagnose, and predict potential deviations in critical process parameters that impact the quality of the final product.

IoTco, the Internet of Things Company, partnered with Voith to implement A.I. solutions to drive their operation toward zero-defects manufacturing. The project aims to deploy a predictive quality solution based on A.I. machine learning that will proactively monitor and predict monofilament manufacturing defects.

The Predictronics platform is used to detect and predict critical quality tensile properties. The initial solution template at Voith on the first monofilament extrusion line is scalable across multiple lines and product recipes.

Key Takeaways:

- Predictive quality solutions, leveraging A.I. and advanced analytics, enable manufacturers to identify issues before they occur. improve quality, optimize processes, minimize scrap, reduce rework, and avoid lost production time.
- Input data to the A.I. solution template includes expert domain knowledge, historic product quality data, and the key process parameters in the production process. Output can take various forms, including dashboards, predictive warnings/alarms, and periodic reports to make the data actionable.
- Reducing scrap by 1% at a mid-size manufacturer will ultimately lead to significant annual savings and payback on the entire solution investment within the first year. Predictive quality is a scalable solution.

FUNDING OPPORTUNITIES



Demonstration Grants Various Amounts

Who: Early-stage companies and/or institutions of higher

education

When: On a continuous basis

Why: To provide funding to small businesses or academic

institutions that are developing a scalable technical solution

to meet an industry challenge



Relocation GrantsVarious Amounts

Who: Companies relocating to S.C.

When: On a continuous basis

To provide funding to technology-based Why: companies relocating to South Carolina to reimburse expenses for moving equipment, up-fitting facilities, etc.



SCRA works with South Carolina-based startup companies in the advanced manufacturing and materials, information technology, and life sciences sectors. In many cases, the SCRA program is the first formal initiative for these companies to begin developing the skills and assets needed to succeed.

The SC Launch team provides access to experienced coaches, state and regional networks, a Resource Partner Network of trusted service providers, CEO podcasts, SCRA webinars, grants, and the potential for investment funding from SCRA's investment affiliate, SC Launch Inc. The SC Launch team also assists companies to obtain additional rounds of institutional investments as they begin to scale.

In 2022, the SC Launch team accepted 31 companies into the program. Each of these companies was reviewed and demonstrated completion of basic business operations and initial planning toward company growth and scaling. The SC Launch team members then continued to work with these companies to assist with identifying relevant milestones and support for the company's next stage of growth.

A Gamechanger in the Packaging Industry

Bubble Paper, a Williamston-based advanced manufacturer, has put South Carolina on the map where environmentally conscious innovation is happening. They have transformed the packaging industry by developing products that are better-performing and eco-friendly replacements for plastic and other non-sustainable shipping materials.

Bubble Paper closed out a seed round, raising the total amount of over \$5,000,000. Bubble Paper became an SCRA Member Company in 2018 and received a \$25,000 Project Development Fund Grant, followed by a \$50,000 Acceleration Grant in 2019. Later that year, they received their first investment of \$300,000, officially becoming SC Launch Inc. Portfolio Company. SC Launch Inc. invested another \$300,000 in 2022 as a part of Bubble Paper's seed round.



Bubble Paper's revolutionary packaging solutions include Bubble Paper Wrap™, Bubble Paper Mailers[™], and Bubble Paper Icebox™. These products replace plastic bubble film wrap, plastic poly mailers, and Styrofoam. Bubble Paper reduces material waste while leveraging well-managed plantbased renewable resources as a one-step curbside-recyclable alternative to traditional plastic packaging. Their engineering and design team tailor-packaging solutions for any application with in-house tooling capabilities that utilize the latest machining and 3D printing processes. Design, tooling, and machine building under one roof speed development and lowers overall costs because of their streamlined process.

Bubble Paper Wrap™ and Bubble Paper Mailers™ provide the same physical protection that current plastic alternatives have at a comparable cost. Founder and CEO Benjamin Moore said, "Bubble Paper Wrap is a void-fill solution fan folded and packed into a box, allowing us to ship about nine times more product than the alternative plastic wrap. This saves the customer on logistics costs and warehouse space. Customers can also recycle it versus the plastic alternative ending up in landfills."

Bubble Paper's most recent development is the Bubble Paper Icebox $^{\text{\tiny{M}}}$. It is a paper-based replacement for Styrofoam coolers and has a two-part liner construction that ships flat and goes into a corrugated box for cold chain applications. This product provides up to 96 hours of protection for customers who need to ship items cold such as groceries, meal kits, medicines, and medical supplies.

Bubble Paper is now taking the manufacturing to the customer's location with onsite manufacturing. Newly engineered machines with automation and internet connectivity allow Bubble Paper to remotely manage operations from their Upstate headquarters for satellite locations and onsite customer locations, reducing logistics costs by up to 90%.

Many areas of the country, including several counties in South Carolina, have already banned plastic foam insulation from keeping food cold and protecting products in shipping. This trend is expected to continue to accelerate, and Bubble Paper is uniquely positioned to leverage this movement.

Bubble Paper's motto is "better packaging, better planet." With Mother Nature in mind, this eco-friendly company is the answer to more versatile, safer, sustainable, and cost-effective packaging solutions.

SC LAUNCH & SC LAUNCH INC. BY THE NUMBERS

\$37.65M

Total amount of SC Launch Inc.'s investments made in 116 SC Launch Inc. Portfolio Companies since 2006

\$15.38M

Total amount of entrepreneurship program grants awarded to 224 SCRA Member Companies since 2006

\$2.33B

Total amount of additional capital raised by SCRA Member Companies and SC Launch Inc. Portfolio Companies since 2006

SUCCESS STORIES





TestedHQ: The R&D Process for the End User

TestedHQ is redefining market research by offering services for professional testers and do-it-yourself consumers to provide market, product, and field research that captures essential customer feedback.

2022 was a year of gaining access to new customers and audiences. They were named a finalist in the coveted NEXT Venture Summit, which prompted CEO and Cofounder Michael D'Onofrio to comment, "It was a great opportunity to showcase the team's tremendous efforts in redefining how consumer product companies capture and deploy end-user feedback in product development." The selection was made from a pool of 95 startups, all vying for a spot on the big stage.

The Mauldin-based startup became an SCRA Member Company in 2021 and received its first grant, a \$25,000 Project Development Fund Grant, later that year. They also received a \$50,000 Acceleration Grant in 2022. Later in 2022, TestedHQ became an SC Launch Inc. Portfolio Company by receiving a \$300,000 investment in the form of a Convertible Note.

TestedHQ's goal is to allow end users to provide feedback on a product before it hits the shelves. They were founded to bring the product development process closer to those who will be using it. They strive to provide their customers with real-user perspectives that ultimately improve the product development experience for the manufacturer and, in turn, a better product for the end user. The process is unique in that it provides unbiased, unprompted, and honest feedback from their testers, who get to use the products the way real customers will use them, with no one watching.

TestedHQ founders have a passion for creating things and producing solutions for business challenges. Their product management and engineering backgrounds are where they gained a true appreciation for the product development process. Co-founder Austin Clark said, "When I heard about the idea for TestedHQ, I was all-in because I knew from experience that there was a massive need for it in the industry, and it was a model I truly believed in."

Tested HQ offers two-pronged solutions, one for the companies and another for the testers. For companies, they take the



When I heard about the idea for TestedHQ, I was all-in because I knew from experience that there was a massive need for it in the industry and it was a model I truly believed in."

Austin Clark. Co-founder. Tested HO

discovery time to figure out what's best suited for their needs, then offer customized packages of services and data that include:

- On-site interviews with certified pros
- Point-of-view (POV) footage of their testers using your product
- Survey data
- Competitor testing
- Marketing opportunities
- User adoption

Their community of testers ranges from trade professionals to highly-skilled DIYers and hobbyists. Once a tester signs up, they choose the testing opportunities and products they are interested in, including:

- Products to test that are delivered right to their doorstep
- Surveys to complete
- On-site interview participation
- POV camera use while testing
- Marketing testimonials

From their humble beginnings, TestedHQ is now trusted by some of the biggest names in product development.



FUNDING OPPORTUNITIES



Acceleration Grants Up to \$50K

Who: SCRA Member Companies

When: On a continuous basis

Why: To accelerate a company to the next level of maturity and market readiness and better position the company for an

SC Launch Inc. investment



Project Development Fund Grants Up to \$25K

Who: Early-stage companies

On a continuous basis

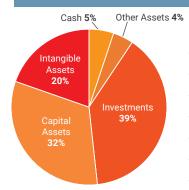
When: To support critical milestones towards

commercialization and advance a company's pursuit Why:

of follow-on funding

SCRA FINANCIALS

As a public nonprofit corporation, SCRA provides financial reporting consistent with regulatory requirements. The following is a summary of SCRA's financial position at the end of Fiscal Years (FYs) 2022 and 2021, and a comparison of revenue generated in FY2022 and FY2021.

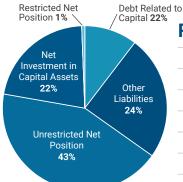


ASSETS	6/30/2022	6/30/2021
Cash	\$5,335	\$5,535
Non-Earning Assets	941	2,343
Investments	40,506	41,680
Capital Assets	33,418	34,693
Intangible Assets	24,591	
Total Assets	\$104,791	\$84,251

(in thousands)

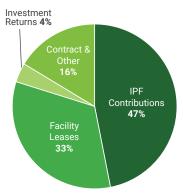
(in thousands)

SCRA Asset Mix as of 6/30/2022



RESOURCES	6/30/2022	6/30/2021
Debt Related to Capital Assets	\$11,677	\$12,499
Other Liabilities	24,793	2,039
Unrestricted Net Position	45,015	45,660
Net Investment in Capital Assets	22,662	22,194
Restricted Net Position	644	1,859
Total Resources	\$104,791	\$84,251
		(in thousands)

SCRA Resources Mix as of 6/30/2022



REVENUE SOURCES	FY2022	FY2021
IPF Contributions	\$8,222	\$4,811
Facility Lease Revenue	5,770	5,437
Investment Returns	666	700
Contract and Other Revenues	2,866	7,904
Total Revenues	\$17,524	\$18,852

FY2022 Revenue Sources

- Intangible assets and other liabilities increased in FY2022 because of the adoption of Governmental Accounting Standards Statement No. 87., Leases.
- In FY2022, IPF contributions increased by \$3.4 million (71%), as more organizations and individuals saw the value of participating in fueling South Carolina's innovation economy
- Lease revenue grew 6% while contract and other revenues, exclusive of the \$7M FY2021 payment related to the sale of Advanced Technology International Inc., increased \$2 million (217%).

INDUSTRY PARTNERSHIP FUND CONTRIBUTORS

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

Diamond - \$200.000+

- Great Southern Homes
- Ameris Bank
- Comporium
- Charleston ENT Associates
- Herndon Chevrolet
- United Community Banks, Inc.
- Yarborough Applegate
- Carolinas Dermatology Group
- Dominion Energy South Carolina
- Home Telecom
- Precision Genetics
- Precision Molecular Solutions

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

- Trident Construction
- Law Office of Seth Rose

Gold - \$100,000 to \$149,999

- Atlantic-Pacific Express
- BlueCross BlueShield of South Carolina
- Geograph Technologies

Silver - \$50.000 to \$99.999

- Retina Consultants of Carolina
- Barwick Plumbing Co
- Palmetto Endodontics
- Streetman Jones Powers
- The Bland Law Firm
- Accounting Systems
- Barb & Company

Surgery Assoc

- Canal Insurance Company
- Charleston Oral & Maxillofacial
- Charleston Spine & Pain Institute
- Richard Harpootlian

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

- Schembra Real Estate Group
- Beau Clowney Architects
- Blair Cato Pickern Caserline
- Albenberg Family Practice

- Charleston Periodontics
- Southeastern ENT, Allergy & Sleep Disorders
- Endodontic Associates of Charleston
- Hilcrest Cosmetic & Family Dentistry
- Matthew Mastrorocco DMD
- Yelverton Law Firm
- Coastal Wealth Management
- Affordable Dentistry
- Black Magic
- Charleston Center for Cosmetic & Restorative Dentistry
- Easley Periodontics
- Lowcountry Endodontics
- Plastic Surgery Consultants
- Brickyard Dental Group
- Blue Ocean Water Inc
- Kids Teeth
- Law Office of Lindsey W Cooper, Jr
- Boyce Ventures
- McCullough Khan
- Megan Stoke
- Fennelly Associates
- SRJ Holdings
- Sunnie Harmon & John DeWorken
- Swenson & Associates
- St. Andrews Dermatology
- All Seasons Landscape & Maintenance
- Bailey Real Estate
- Carolina Waterworks
- Charleston Concrete Construction
- Christopher J. Caputo, D.M.D.
- Coastal Dental Group
- Edward T. Murphy DMD
- Ethical Patient Advocacy
- Fennelly Associates

- Kozcloses
- Marc Chary Hilton Head Rentals
- Matt Moore
- NE Columbia Family Dentistry
- K Britt Reagin, MDM, MS
- Christopher L. Andrews, DMD
- Cornerstone Children's Dentistry
- Management Recruiters of Simpsonville
- Root Holdings
- Lauren Callison DMD
- The Suitcase of Courage
- Bonnie J Rothwell, DMD
- Compass Financial Strategies
- Hood Construction Company
- Law Offices of Marion M Moses
- Periodontal Associates, LLC
- Palmetto Investment Consultants
- Tango 4
- Ascend Foods
- Professional Movers of Charleston
- Mavin Construction
- H5 Advisors
- Holy City Dentistry
- J Musselman Construction
- Lake Murray Pediatric Dentistry
- Michael Armstrong DDS
- Roebuck Family Dentistry
- Ron Banik DMD
- Sleepy Owl Dentistry
- Southeast Endodontics
- Southern Roots Periodontics Implant & Laser Dentistry
- Stephen Woody Truluck State Farm Agency
- Structure Painting
- Tompkins, Thompson & Brown



Diamond Contributors



















































Canal





SCRA Annual Report 2022 | 29

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, South Carolina State University, 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. Linda M. Distlerath, Ph.D., J.D.Principal, Bamberg Advisors LLC



Dr. Michael Amiridis, Ph.D.President
University of South Carolina



Hon. Jason Elliott, Esq.Attorney and Member of the SC House of Representatives



Dr. L. Fred Carter, Ph.D.President
Francis Marion University



Hon. Lawrence K. (Larry) Grooms Senator, South Carolina Senate



Dr. James P. Clements, Ph.D.President, Clemson University



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



Dr. David J. Cole, M.D., FACSPresident, Medical University of South Carolina



Ms. Lou KennedyPresident, CEO, and Owner, Nephron
Pharmaceuticals Corporation



Col. Alexander Conyers (Ret.) President South Carolina State University

SCRA was pivotal for MitoChem early on in that it had incubator space that allowed the company to have wet lab space to advance our technology and develop compounds."

Board Members

Mr. Don Herriott

SCRA Board Chairman, Entrepreneur, and Business Owner

Dr. Michael Amiridis

President, University of South Carolina

Mr. Bryant G. Barnes

President and CEO, Comporium Communications

Dr. L. Fred Carter

President, Francis Marion University

Dr. James Clements

President, Clemson University

Dr. David J. Cole

President, Medical University of South Carolina

Col. Alexander Conyers

President, South Carolina State University

Ms. Jill Davis

Executive Vice President, Strategic & Diversified Businesses
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.

Hon. Jason T. Elliott

Representative, SC House of Representatives, Attorney Jason Elliot, Attorney at Law LLC

Mr. Sean Flynn

Regional Director/Civil Manager, Thomas & Hutton

Hon. Lawrence K. (Larry) Grooms

Senator, SC Senate

Ms. Jo Watson Hackl

Attorney, Wyche, P.A.; Author

Mr. Robert W. (Wes) Hayes, Jr.

Chairman, South Carolina Commission on Higher Education

Attorney Robert W. Hayes, Jr. LLC

Ms. Heather Simmons Jones

Director of Southeast Operations, MRB Group

Ms. Lou Kennedy

President, CEO and Owner, Nephron Pharmaceutical Corporation

Sec. Harry M. Lightsey, III

Secretary, South Carolina Department of Commerce

Dr. Vahid Majidi

Director, Savannah River National Laboratory

President, Battelle Savannah River Alliance

Dr. Kristin Manske

Chief Executive Officer, Greenwood Regional Rehabilitation Hospital

Dr. Maurice Scherrens

Chair, Council of College Presidents

President, Newberry College

Mr. Roger P. Schrum

Chairman, South Carolina Board of Technical and

Comprehensive Education

Ms.Sue-Ann (Susie) G. Shannon

President and CEO, South Carolina Council on Competitiveness

Mr. David M. Smalls

Executive Director, South Carolina Artisans Center



We were able to pick up SC Launch Inc.'s investment that moved our company forward, and it truly allowed us to take the company to the next level at that time."

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 SCRA Member Companies. 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 North America Inc.



Patti Leahy Consultant/Advisor



Ms. Andrea Marshall, JD SC Launch Inc Board Vice Chair: Vice President General Counsel, and Administrative Officer MedTrust Holdings Inc.



Dr. W. Patrick Springhart, MD Chief Value Officer Prisma Health System



Mr. Timothy Davis CEO Advanced Care Management LLC



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



Mr. Clifford Holekamp Managing Director & General Partner **Cultivation Capital**



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



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

SCRA has helped us make introductions that will enable us to automate the manufacturing of our technology in the future."

Miro Pastrnak, Co-founder, Victory ExoFibres

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. Cole Dudley Director, SC Industry Solutions



Mr. Matt Bell Director, SC Launch Executive Director, SC Launch Inc.



Ms. Adrianne Grimes Director, Marketing and Communications



Mr. Russell Cook Director, SC Academic Innovations



Ms. Yolanda Lewis Director, Human Resources



Mr. Randy Cutts Director, SC Facilities



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



Dr. Jim Doolittle Director, South Carolina Established Program to Stimulate Competitive Research (SC EPSCoR)



The relationships and networking through SCRA has made my vision seem accessible, desirable, and tangible. The future is bright at BrightMa Farms and we're excited to have SCRA on our side."

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

Vice President, Regulatory Strategy (US), Blue Earth Diagnostics

Ms. Becky DeLegge

Founder, Principal/Chair, Delegge Medical

Mr. Rich diMonda

Medical Device Commercialization Advisor, Clemson University

Ms. Erica Jackson

Attorney

Mr. Bill Killough

Registered Patent Attorney, Kim, Lahey & Killough Law Firm

Dr. Martine LaBerge

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

Dr. Prakash Nagarkatti

Senior Research Advisor to the UofSC President and Senior Research Officer University of South Carolina

Mr. Ron Owens

Senior Vice President & Chief Investment Officer, Evening Post Industries

Mr. John Propst

Program Lead, Verily (Google Life Sciences)

Ms. Amy Salzhauer McMarlin

Founder & Managing Partner, Good Growth Capital

Ms. Patricia Scheller

CEO/Executive Chair, Universal Men's Clinic/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, MUSC

SCRA grew with us, they knew what we needed at every particular phase of UASidekick's growth process."

Jason Cansler, Co-Founder, UASidekick

Cybersecurity

Mr. Brad Alexander

Vice President & Chief Technology Officer, DartPoints

Mr. Wiley Becker

Partner, Alerion Ventures

Mr. Chad Britt

Control Systems Manager, DSM Nutritional Products

Mr. Jon-Michial Carter

CEO & Founder, ChartSpan Medical Technologies

Ms. Kim Christ

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

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

Ms. Julie Kunkle

Deputy Director, Business Services, South Carolina Department of Commerce

Mr. Charles Johnson

President of Cybersecurity Corsica Technologies

Mr. John LaCour

Founder, PhishLabs

Mr. Zack Moody

Head of Global Information Security, AVX Corporation

Dr. Daniel Noneaker

Associate Dean of Research, Clemson University

Mr. David Setzer

CEO, Mailprotector

Industry 4.0

Mr. Bill Killough

Registered Patent Attorney, Kim, Lahey & Killough Law Firm, Chair

Mr. Wiley Becker

Partner, Alerion Ventures

Mr. Chad Britt

Control Systems Manager, DSM Nutritional Products

Mr. Alex Chalmers

Founder, Material Capital Partners

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 of Mechanical Engineering, University of South Carolina

Ms. Sara Hazzard

President & CFO, 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 Consultants, ETO

Mr. Dan Rundle

Chief Executive Officer, Worthwhile



SCRA has been incredibly accommodating throughout our time at the innovation center! Whether it be with freight deliveries or personally dropping off packages."

