

We are

INNOVATION

 SCRA

2015

We

DEVELOP

South Carolina's  
technology-based economy.



## SCRA'S ECONOMIC OUTPUT IN SOUTH CAROLINA

SCRA grows the technology-based economy in South Carolina. Through our Technology Ventures sector and its SC Launch program, we invest in the formation and growth of early-stage technology companies across South Carolina and support the relocation of established technology companies to the state.

SCRA provides critical infrastructure for South Carolina's technology-based economy through our SCRA R&D Facilities sector. SCRA R&D Facilities designs, builds and manages offices, labs and advanced manufacturing spaces where new technologies are commercialized.

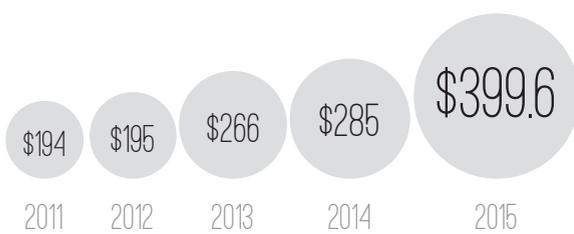
Our operations and economic development mission are sustained through the SCRA Applied R&D sector, which manages R&D portfolios on behalf of federal and industry clients. SCRA Applied R&D leads \$4.9 billion in research consortia that develop and apply new technologies.

**We continue to deliver on our tech-based economic development mission, increasing our economic impact within South Carolina.**

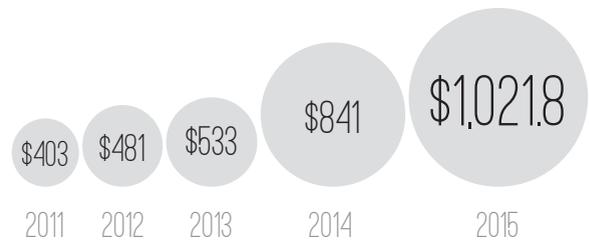
We

# SUSTAIN

our economic development  
mission using income  
earned through leadership  
of federally-funded research  
programs.



AUDITED REVENUES (\$ MILLIONS)



AUDITED BACKLOG (\$ MILLIONS)

Fiscal Year 2015 was the fourth consecutive year that SCRA's business operations' numbers grew to record-breaking levels.

Since 2006, SCRA has deployed over \$100 million in investments and infrastructure to advance South Carolina's high-tech indus-

tries. Additional cumulative results since that time validate SCRA's fulfillment of its public mission to South Carolina and include: the funding of 313 technology startups, \$21.6 million in direct investments in the top 78 startups, which have captured \$362.7 million in additional private investments and

the creation of over 1,000 jobs with average annual per capita wages of \$69,000. A recent University of South Carolina Darla Moore School of Business economic impact study determined that our economic output in the state was \$1.4 billion in 2015.

Our earnings are carefully invested in South Carolina's growing technology-based economy.

investing in

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# ATION

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SCRA grows the technology-based economy in South Carolina. We invest in the formation and growth of early-stage technology companies and support the relocation of established technology companies to the state.

We

INVEST

in the commercialization  
of new technologies, the  
growth of new companies  
and the creation of jobs.



MENTORING  
AND SUPPORT



SBIR/STTR  
MATCHING GRANTS



LANDING PARTY  
SUPPORT



EARLY-STAGE  
COMPANY INVESTMENTS

## A COMPREHENSIVE SUITE OF ENTREPRENEURIAL SUPPORT TOOLS

SCRA enables research commercialization and promotes the development of high-tech industries. Our innovative SC Launch program makes investments in and offers support services to South Carolina's early stage, start-up technology companies.

SC Launch-supported companies receive mentoring and access to

a robust network of business service resources such as legal, marketing, banking, prototyping and manufacturing.

Companies that complete a rigorous qualification process and are approved by the SC Launch Board receive equity-based or convertible debt investment from SC Launch.

Eligible companies may also receive matches to federal Phase I SBIR/STTR grants or University Start-up Assistance Program grants.

SC Launch also provides relocation assistance to established technology companies from other states and countries moving to South Carolina.

**The average annual wage of technology-based jobs created by SCRA is \$69,000.**

We

FOSTER

early stage  
technology-based  
companies

and

SUPPORT

high-tech  
enterprises  
as they grow.



- LIFE SCIENCES
- INFORMATION TECHNOLOGY
- CHEMICAL AND ENGINEERING
- ADVANCED MATERIALS
- ENERGY
- TRANSPORTATION
- DEFENSE

## GROWING SOUTH CAROLINA'S KNOWLEDGE ECONOMY

SCRA's support of early-stage companies and ability to move IP from research universities into the commercial market are embodied in the story of the bioscience company KIYATEC.

Entrepreneurial graduate students at Clemson University developed a way to grow cells that mimic the attributes and behaviors of human tissue. This enables testing that accurately predicts responses to drug treatment without ever exposing actual patients to drugs. KIYATEC,

Inc. was formed to commercialize the Clemson-patented technology. Recognizing the commercial potential, SCRA's SC Launch program made an early investment in the company. As KIYATEC met technology development goals, the company received additional investments from SC Launch.

KIYATEC's move to a lab inside Greenville Health System's Institute for Translational Oncology Research enabled further testing and product development.

In 2014, KIYATEC received a \$1.975 million National Cancer Institute contract to expand their 3D breast cancer model. In 2015, the company received a second \$1.725 million contract, also from the National Cancer Institute, to tackle lung cancer using cancer stem cells.

With multiple investments from SC Launch, KIYATEC has grown its potential to radically change the future of cancer patient care.

**Companies receiving SC Launch investments have received \$362.7 million in additional capital from venture and other private sources.**

managing

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**SCRA creates and manages portfolios of R&D projects for corporate and federal clients. We organize and lead teams that develop technologies and put those technologies into widespread use.**

We

# MANAGE

R&D portfolios that develop  
technology solutions for  
federal and corporate clients.



ADVANCED  
MATERIALS



ARMAMENTS



ELECTROMAGNETIC  
SPECTRUM



SHIPBUILDING  
AND REPAIR



MEDICAL  
TECHNOLOGIES

## NEW PROGRAMS HAVE BEEN WON. EXISTING PROGRAMS HAVE EXPANDED.

SCRA Applied R&D helps federal agencies accomplish their missions by creating innovative models for R&D portfolio management.

We build and lead technology development teams, recruiting and organizing collaborations of industry and academic organizations to execute the projects in federal agencies' R&D portfolios. SCRA Applied R&D's tailorable consortia model facilitates team-

ing among consortium members while preserving competition at any desired stage of project development. After award, we provide ongoing support so members can effectively complete projects and then transition the outcomes widely into military and commercial markets.

Our current focus areas include advanced materials, Department of Defense prototypes, electro-

magnetic spectrum technologies, shipbuilding and medical technologies, but our research management approach can deliver solutions to any industry or any set of complex challenges.

SCRA Applied R&D revenues keep SCRA self-sustaining and support our economic development mission through Stage 2 affiliate investments in established SC technology companies.

Successful delivery of critical new technologies has led to expansion of several of our applied research programs.

We

**BUILD** and **LEAD**

teams from many organizations  
and industries to develop and  
deploy new technologies.



## TEAMING

SCRA Applied R&D creates and organizes research teams that develop and apply technological innovations. One example is the National Armaments Consortium (NAC), a team that develops defense prototypes. NAC has added more than 100 new member organizations since SCRA Applied R&D assumed the Consortium Management Firm role in 2009. Many are non-traditional small businesses - valuable sources



## TECH ROADMAPS

of new technology that lack the contracting experience necessary to perform work for the federal government. The consortium has 86 non-traditional contractors among its membership - 31 percent of total membership.

Another hallmark of SCRA Applied R&D programs is rapid application of federal funds to create critical technologies. Our efficient solicitation model has resulted in



## TECH TRANSFER

more than 400 initiatives awarded to NAC members totaling more than \$1.4 billion since 2009.

Another SCRA Applied R&D core competency is effective technology transition - the transfer of valuable technologies to widespread industry use. Our U.S. Navy client reports that the transition rate of our shipbuilding programs is 80 percent, vs the 30 percent typical of similar programs.

**We pioneered and perfected the art of consortia management, resulting in widespread application of new technologies.**

housing

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SCRA builds and manages research parks that advance South Carolina's tech-based economy. Our Innovation Centers are stepping stones where intellectual property from research universities and industry is used to form technology companies.

We

HOUSE

the entrepreneurs that  
develop innovative  
technologies.

SCRA HAS  
INVESTED MORE THAN  
**\$74,000,000**  
IN RESEARCH PARKS AND  
INNOVATION CENTERS



THREE AWARD-WINNING INNOVATION CENTERS  
LABS, OFFICES AND MANUFACTURING FACILITIES  
TEMPORARY HEADQUARTERS FOR COMPANIES LIKE  
BOEING AND VOLVO COMING TO SOUTH CAROLINA

## WHERE SOUTH CAROLINA'S KNOWLEDGE ECONOMY GROWS

A major component of SCRA's economic development mission in South Carolina is the creation and management of research parks and facilities. Our research parks have been identified by a Darla Moore School of Business study as major contributors to job growth and economic output in the state.

Our three Innovation Centers - one in Anderson, one in Columbia and

one in Charleston - are award winning facilities that contain business offices for entrepreneurs and laboratory and manufacturing spaces for growing technology-based businesses.

In addition to entrepreneurs forming businesses and our own consortia leadership operations, SCRA facilities house technology-based companies relocating to South Carolina. Boeing maintained

offices on an SCRA campus while build-out of their own facilities was completed. Volvo has begun operations at our Summerville Applied Technologies Center while their new SC manufacturing site is built. Aeterna Zentaris, a multinational bio-science company recently established their US headquarters in the SCRA Applied Technologies Center.

**Our Technology Parks and Innovation Centers  
comprise over a million square feet of  
research facilities and office space.**

We

BUILD

and

MANAGE

facilities where intellectual  
property from universities and  
industry is commercialized.



## OFFICES, RESEARCH LABS, MANUFACTURING FACILITIES

As part of SCRA's commitment to growing South Carolina's technology-based economic landscape, we invest in facilities designed to move university-generated intellectual property into the market.

SCRA is a founding investor in the University of South Carolina's McNAIR Center. This aerospace research facility, housed within SCRA's Columbia Innovation Center, advances South Carolina's aerospace industry through education and research leadership.

Focus areas include steered fiber laminate design, structural composite part production and automation.

SCRA is a Founding Innovation Partner in the 21st Century Innovation Center at Clemson. This state-of-the-art facility will enable students and faculty mentors to develop technologies and connect to industry partners. SCRA's investment will support cross-discipline operations and equipment to connect the 21st Century Innovation Center at Clemson,

other SC research universities and SCRA Innovation Centers.

With support from SCRA, Aeterna Zentaris, a multinational bioscience leader, located in SCRA's Applied Technologies Center in Summerville and partnered with the Medical University of South Carolina. Through this partnership they gained access to the university's compound library. There is a plan to commercialize this university intellectual property at the SCRA MUSC Innovation Center in Charleston.

# Inventions and ideas become technologies and companies in SCRA Innovation Centers.

We

COMBINE

the roles and functions that  
result in effective economic  
development.

SCRA HAS GENERATED

\$19,500,000,000

INCLUDING  
\$1,400,000,000  
IN 2015

OF ECONOMIC IMPACT  
IN THE STATE OF SOUTH CAROLINA

1,000,000

SQUARE FEET OF RESEARCH  
INFRASTRUCTURE IN SC

LABS  
OFFICES  
MANUFACTURING FACILITIES

313

TECH COMPANIES  
FORMED IN SC WITH  
SC LAUNCH  
SUPPORT

17

COMPANIES FROM  
OTHER US STATES,  
CANADA, AUSTRALIA  
AND ISRAEL WERE  
SUPPORTED IN THEIR  
MOVE TO SC

15,000

JOBS CREATED  
MOSTLY IN TECH-BASED  
ENTREPRENEURIAL  
BUSINESSES

WITH ANNUAL WAGES BETWEEN

\$55,000

AND

\$79,000

\$100,000,000

DIRECTLY INVESTED IN COMPANIES,  
INFRASTRUCTURE AND  
SUPPORT SERVICES  
SINCE 2006

INVESTED IN OFFICES, LABS AND MANUFACTURING  
FACILITIES

DIRECT INVESTMENTS IN EARLY-STAGE  
TECHNOLOGY-BASED COMPANIES

SBIR/STTR MATCHES

LANDING PARTY SUPPORT

STAGE 2 INVESTMENTS IN COMPANIES REACHING  
ADVANCED GROWTH STAGES

SUPPORT SERVICES SUCH AS IP PROTECTION,  
BANKING, MARKETING AND LEGAL ASSISTANCE

We

DELIVER

value through the hard  
work and dedication of  
our associates and the  
vision of our leadership.

## EXECUTIVE MANAGEMENT TEAM

**Bill Mahoney**  
Chief Executive Officer

**Julia Martin**  
Chief Financial Officer

**Chris Van Metre**  
President, SCRA Applied R&D

**Ambrose Schwallie**  
Executive Vice President,  
Corporate Development

**Marvin Davis**  
Executive Vice President,  
SCRA R&D Facilities

**Natalie Corella**  
Executive Vice President,  
Contracts and Compliance

## BOARD OF TRUSTEES

SCRA Trustees are drawn from leading corporate and academic organizations and economic development institutions.

**Mr. William M. Blume, Jr.**  
SCRA Board Chairman  
Senior Tax Partner,  
Ernst & Young (ret)

**Mr. George W. Fletcher**  
President,  
Fletcher Engineering, LLC

**Mr. E. Preston (Pres) Rahe, Jr.**  
President,  
Washington Group International

**Mr. Bryant Barnes**  
President & CEO,  
Comporium Communications

**The Honorable Bobby M. Hitt**  
Secretary,  
South Carolina Department of  
Commerce

**Mr. James (Jay) Cuthbert Self, III**  
President & CEO,  
GMI Holding (Greenwood Mills  
& Greenwood Communities and  
Resorts)

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

**Dr. Coleen Perry Keith**  
President,  
Spartanburg Methodist College

**Dr. Keith Y. Shah**  
VP, Corporate Planning &  
Strategic Services,  
BlueCross BlueShield of South  
Carolina

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

**Senator Hugh K. Leatherman, Sr.**  
Chairman,  
SC Senate Finance Committee

**Mr. David M. Smalls**  
State Director,  
Communities in Schools South  
Carolina

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

**Mr. R. Douglas MacIntyre**  
Former Chief Executive Officer,  
Dun and Bradstreet Software

**Ms. Sherry C. Smith**  
Principal,  
Zephyr Financial

**Mr. Peter G. Dunphy**  
Treasurer,  
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**Dr. Terry A. Michalske**  
Laboratory Director,  
Savannah River National  
Laboratory

**Dr. Charles K. Watt**  
Founder & Consultant,  
Scientific Research Corporation

**Dr. Franklin Evans**  
President,  
SC State University

**Mr. Ralph (Nick) A. Odom, Jr.**  
VP, Environmental, Health &  
Safety,  
Springs Industries, Inc.

**Rep. Brian White**  
Chairman,  
House Ways & Means Committee

**Brig General John L. Finan**  
Chairman,  
SC Commission on Higher  
Education

**Dr. Harris Pastides**  
President,  
University of South Carolina

**Mr. Jonathan M. Zucker**  
President,  
The InterTech Group

investing in      managing      housing

# INNOVATION