

The Regional Innovation Strategies Program

Office of Innovation and Entrepreneurship

17 May 2016



WELCOMING REMARKS



Angela Ewell-Madison

Director, Office of Legislative and Intergovernmental Affairs



ARROWHEAD INNOVATION NETWORK



New Mexico State University





WELCOMING REMARKS



Craig Buerstatte

Deputy Director, Office of Innovation and Entrepreneurship



START WITH THE END IN MIND



Why Do We Do What We Do?

Increase U.S. economic competitiveness globally

Help communities become economically resilient and agile

Improve quality of life in communities across the U.S.









We create the conditions for economic growth by

- leveraging EDA's regional focus and national programs;
- investing in ecosystem builders;
- building capacity and reinforcing culture of innovation; and
- encouraging and supporting public-private partnerships.





We leverage investments, information, and connections by

- investing through grant programs;
- gathering, analyzing, and sharing data and best practices; and
- connecting community and regional stakeholders.

With these tools, we aim to catalyze economic growth.



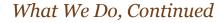


Established by the America COMPETES Reauthorization Act of 2010 Reimagined and retooled in 2014

DIRECTOR	Julie Lenzer
DEPUTY DIRECTOR	Craig Buerstatte
SENIOR POLICY ADVISOR	Eric Smith
PROGRAM ANALYST	Andria Fisanich
ADMINISTRATIVE SPECIALIST	Chavarria Harris



KEY ACCOMPLISHMENTS





- Created the Regional Innovation Strategies (RIS) Program
- Reestablished the National Advisory Council on Innovation and Entrepreneurship (NACIE)
- Created the **Open for Innovation** event series
- Participated in the Lab-to-Market subcommittee of the NSTC
- Helped plan the Global Entrepreneurship Summit
- Selected to lead the G20 Innovation task force



THE RIS PROGRAM





- Authorized by the America COMPETES Reauthorization Act of 2010, as amended by the Revitalize American Manufacturing and Innovation Act of 2014 (15 U.S.C. § 3722)
- Encompasses
 - the i6 Challenge;
 - the Seed Fund Support Grant competition; and
 - Science & Research Park Feasibility & Planning grants (2014 only)
- Overwhelming demand: evidence of community interest and needs

2016 RIS Program FFO closes 11:59pm ET on June 24



THE RIS PROGRAM





- i6 Challenge
 - Funding to help turn ideas and inventions into products and companies
 - Retooled in 2014 to be more accessible and inclusive
- Seed Fund Support Program
 - Fills gaps in early stage capital for startups
 - Created in 2014 in response to stakeholder feedback







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THE RIS PROGRAM





- 1. BioSTL
- 2. The University of North Carolina at Chapel Hill
- 3. Maryland Technology Development Corporation (TEDCO)
- 4. Innovation Works



ST. LOUIS REGIONAL BIOSCIENCE PROOF OF CONCEPT CENTER



BioSTL and BioGenerator

Problem or Opportunity

- Academic researchers rarely equipped to adequately asses the commercial market potential and design the necessary milestones for commercial proof of concept and business plan development
- Existing programs ,like SBIR/STTR, help to advance technology readiness, but often fail to support market-based commercialization, esp. where innovators lack business expertise

Solution or Project Description

- Bringing external, industry experts to the table early advances market evaluation of technologies and better positions universities and innovators for commercialization
- Two stage evaluation and experimentation process allows for continuous improvement of technologies toward market-aligned commercial milestones

- 14 promising, but previously un-commercializable, technologies significantly advanced
- 5 new companies launched
- More than \$1 million in private capital attracted to new companies





TECHNOLOGY COMMERCIALIZATION CAROLINA



University of North Carolina

Opportunity

- Promising ideas abound across university system
- Great inventions need business acumen
- Technology companies across state poised for growth

Technology Commercialization Carolina is:

- Patent, Market and Funding Opportunity Research to determine viability
- StartUp Consulting & Workshops to provide a solid business foundation
- Entrepreneur Technical Assistance Program to accelerate non-University high growth firms

- 30 non-UNC clients from across state including Historically Black and American Indian Universities
- Series A financing; companies incorporated; patents pending; increased access to existing resources
- Flanders Filters, Shure Foods, P&A group





mdPACE PROGRAM



Maryland Technology Development Corporation (TEDCO)

- Maryland needs experienced entrepreneurs to lead medical device commercialization.
 - Central Maryland has many unique resources that support medical device innovation.
 - However, Maryland ranks low nationally in the commercialization of its innovations.
 - There are few entrepreneurs with the experience needed to commercialize medical devices.
- mdPACE provides early-stage companies with experienced medical device executives.
 - The executives help inexperienced entrepreneurs obtain an FDA 510(k) clearance for a first product.
 - This creates a value inflection point for the company and better positions them for investment of capital.
 - The inexperienced entrepreneurs gain the experience needed to clear other products.
- mdPACE is impacting the companies that are engaged with the program.
 - Infinite Biomedical Technologies Sensors for prosthetics
 - Sonavex Implantable device for ultrasound imaging of vein grafts
 - Innurvation 360 degree FoV endoscopy imaging capsule





IW BUILDS



Innovation Works/Ben Franklin Technology Partners

Opportunity

- SW Pa. is a top market in the US for hardware startups AlphaLab Gear, TechShop, CMU
- Those startups need a supply chain of manufacturers
- Manufacturing is the largest economic sector in rural SW Pa., but startups are not finding local suppliers

Project Description

- AlphaLab Gear is one of top accelerators in US and is the only hardware accelerator focused on domestic manufacturing – RIS supported its launch in 2013
- New RIS grant is creating IW Builds draws local, rural manufs. to help Gear cos. with product design
- Manufacturers find new high-growth customers; startups find local, cost-effective supply chain partners

- AlphaLab Gear has launched 26 companies in three years
- Those companies have raised almost \$10M in follow-on funding and employ nearly 100 people
- Expecting to engage at least 48 manufacturers with IW Builds







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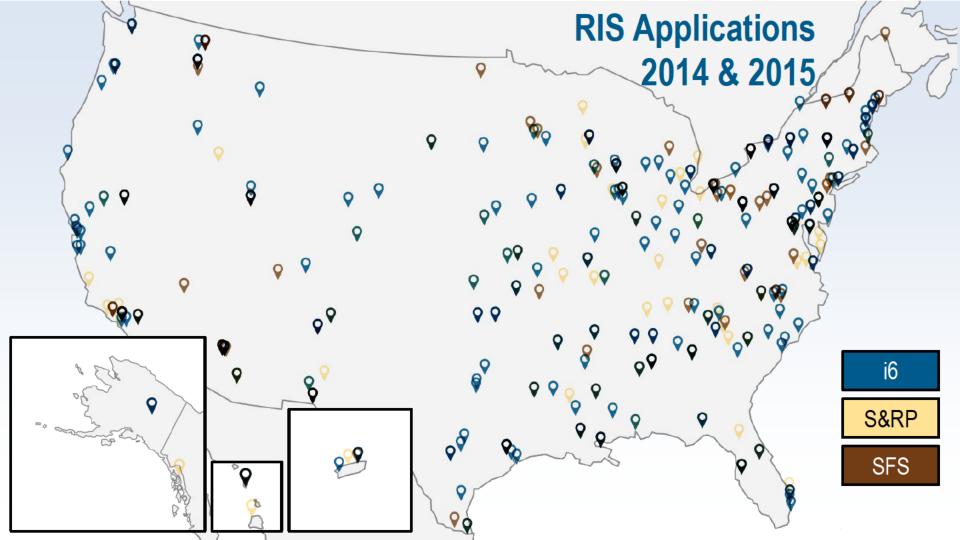
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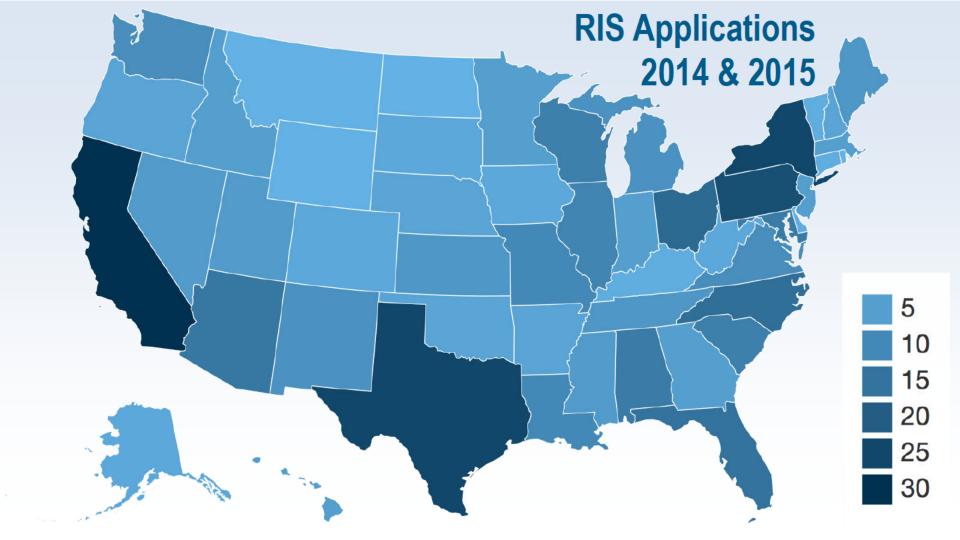
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RIS Applications The Whole Universe



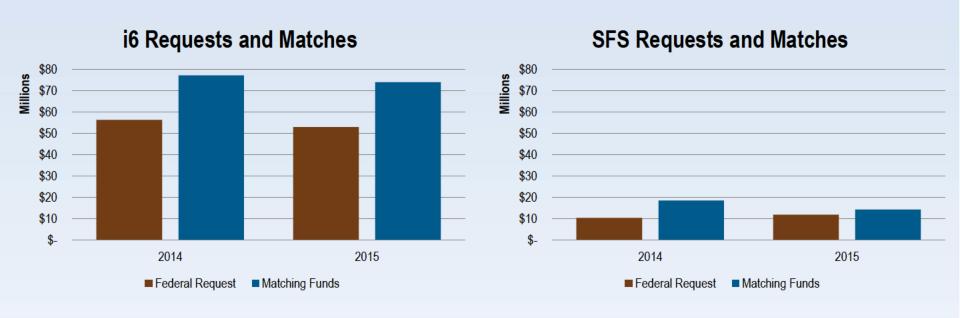




FUNDING



Federal Requests and Matching Funds



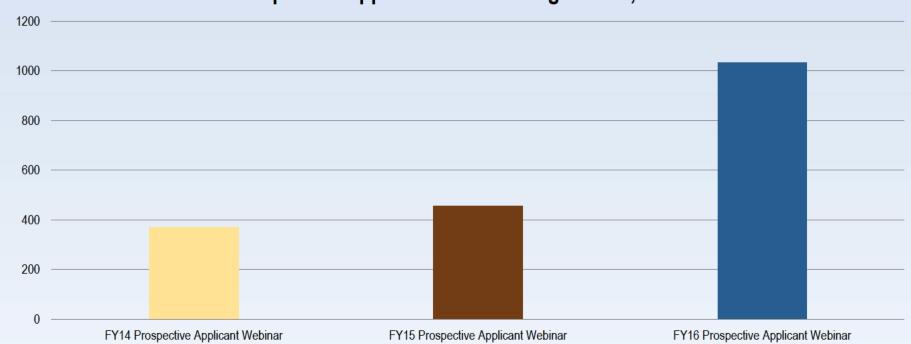


PROGRAM INTEREST & DEMAND

Webinar Attendance



RIS Prospective Applicant Webinar Registrants, 2014-2016

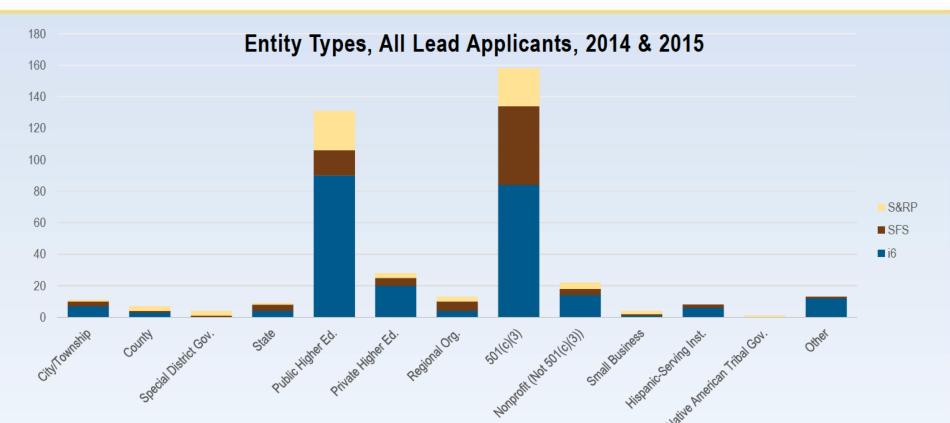




ENTITY TYPES

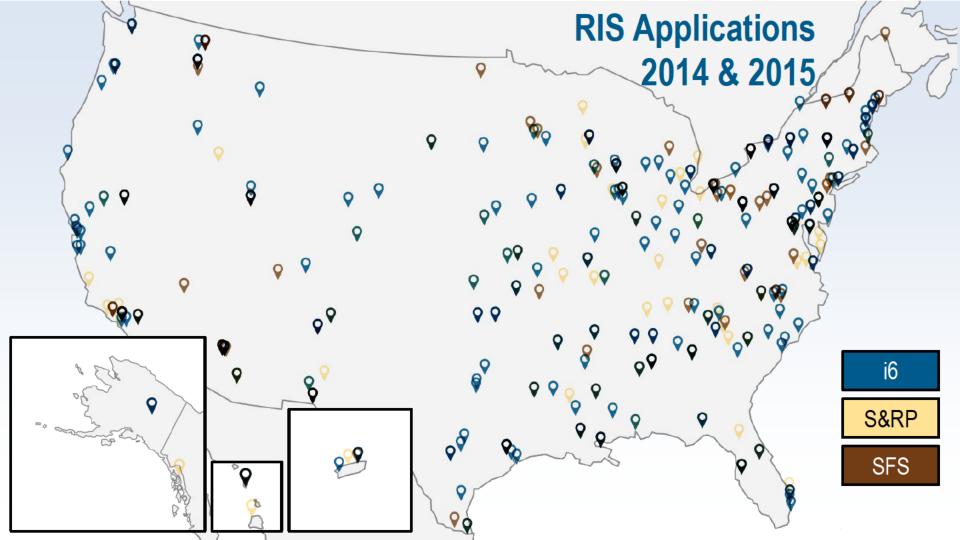


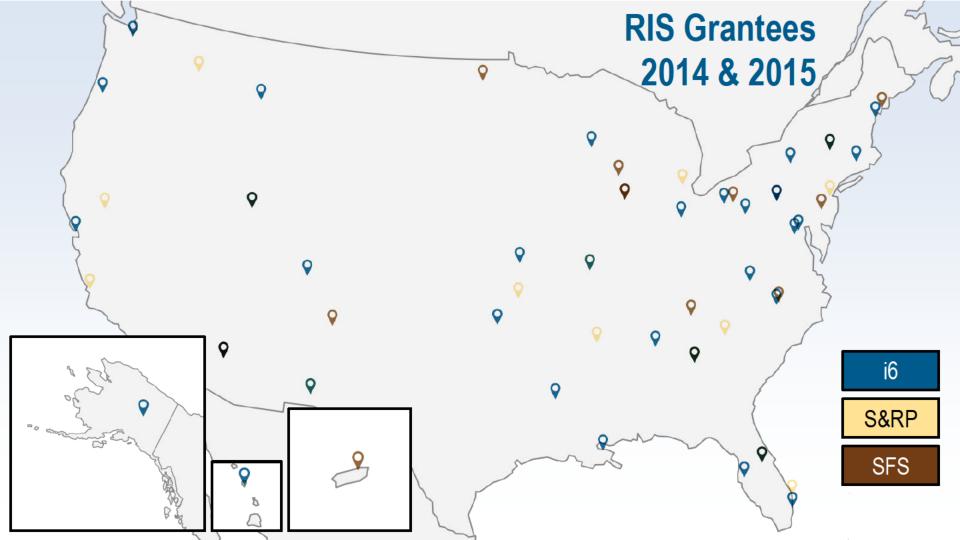
All Lead Applicants, 2014 & 2015



RIS Grantees

2014 & 2015





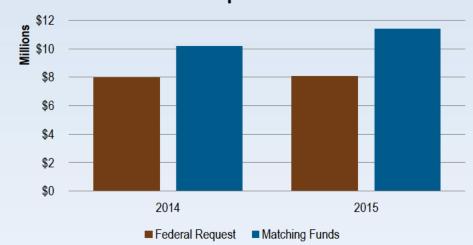


GRANTEE FUNDING

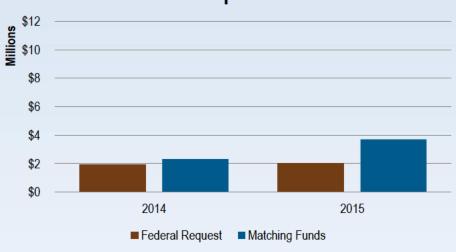


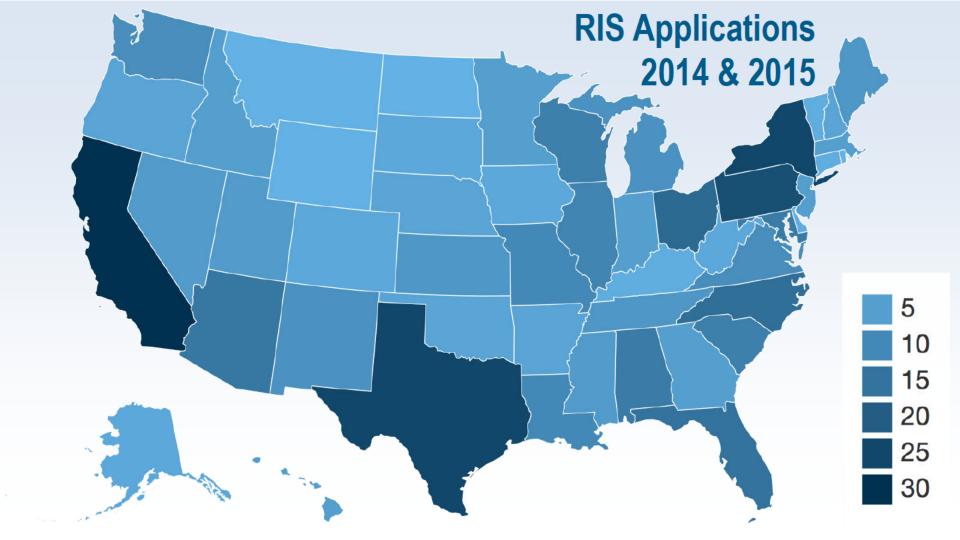


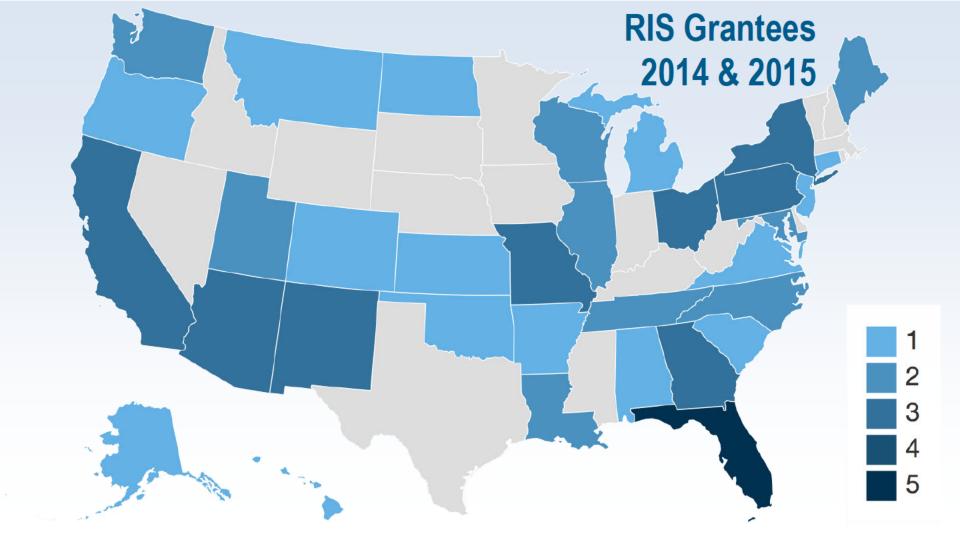
i6 Grantee Requests & Matches



SFS Grantee Requests & Matches









GRANTEE SUCCESSES





- New Orleans BioInnovation Center (NOBIC) (FY14)
 - 55 clients served, who reported creating 136 jobs, filing 115 patent applications, raising \$19.7m in funding, and reaching \$6.7m in sales
 - 175 technical assistance meetings, 45 mentoring sessions, 7 SBIR applications supported
- Virginia Innovation Partnership (FY12)
 - Funded 36 projects for a total of more than \$1.6m
 - 12 new ventures launched
 - More than \$4.3m in follow-on funding raised



MISSED OPPORTUNITIES



Fundable but Unfunded Applications

- 83% of RIS applications (2014-2015) have been fundable.
- 15% were funded based on appropriated funds.
- 67%—or 276—applications were fundable but left unfunded.
- We've left \$128.5m in matching funds alone from fundable applications on the table.



REGIONAL INNOVATION



Future Policy and Program Initiatives

We want your ideas.







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- 2016 RIS Program Information
- EDA Contact Information
- Additional Grantee Program Descriptions



2016 RIS PROGRAM INFORMATION



RIS Program Website: https://www.eda.gov/oie/ris/

2016 RIS Program Federal Funding Opportunity: http://www.grants.gov/web/grants/view-opportunity.html?oppId=282919

2016 RIS Program applications are due by 11:59pm on June 24, 2016!

2016 RIS Program Prospective Applicant Webinar & Slides:

https://cc.readytalk.com/cc/playback/Playback.do?id=8ep7xh http://ssti.org/webinar/edafy16applicantwebinar.pdf

To stay up-to-date on all things RIS, sign up for **EDA's newsletter and email blasts** here: https://public.govdelivery.com/accounts/USEDA/subscriber/new







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HARDWARE ENTREPRENEURSHIP ECOSYSTEM



Southern Tier Startup Alliance

Problem or Opportunity

- Increasing awareness of regional resources for hardware focused startups.
- Connecting member companies to increased private investment.



Solution or Project Description

 Serve as a convening organization of the regional hardware ecosystem and connecting it to national and global resources in the form of joint venture partners and providers of growth capital.

- Held approximately 150 technical assistance meetings between startups and mentors.
- Assisted 14 startups in product development and provided introductions to investors. These startups now have a cumulative of 6 pending patents and over \$6000,000 in private investment.





- Current Venture Capital underperforms yet ecosystems perceive an early capital gap
 - Throwing more money at the problem continues to drive down returns
 - Firms are consolidating into larger, later firms with larger checkbooks yet...
 - Starting a business is cheaper than ever

Quatere Capital is formed

- Specifically addresses the gap of smaller expansion capital
- Provides a low risk solution to Community Reinvestment Act banking requirements
- Better aligns limited partners and fund general partners

- Created in one of the nations top performing ecosystems
- Aligns with local non profit and government initiatives
- Is attracting the attention of top investors and entrepreneurs



HIGH-TECH INCUBATOR/INNOVATION TO INVENTION CENTER (I²C)



The University of Alabama at Huntsville







With the help of EDA, the University of Alabama Huntsville (UAH) has plans to build and operate a 45,000 sq. ft. Innovation to Invention Center (I²C) on campus to stimulate growth of new and existing high tech companies, and to catalyze formation of a resilient entrepreneurial ecosystem within a 15 county region that includes northern Alabama and south-central Tennessee. The I²C will play a role in increasing innovation by leveraging "shelved" technologies from defense and space that could lead to a number of inventions that can now be developed into successful commercial products, and produce start-up firms, business expansion, and economic growth initiatives. With an anticipated construction time of 24+ months (after ground breaking this calendar year), the EDA OIE RIS GAP program is designed to create a virtual Proof of Concept Center (POCC) to jump start operations in the Innovation Center by hiring a Program Director and developing processes and procedures to stream line activities within the Center. It will help to build a virtual network of relationships to engage and grow the innovation capacity within the region, engage our committed partners within the region, and establish a level of operational capacity before the building is completed.





Problem or Opportunity

- Not enough access to mentoring, funding, and technical assistance for Bioscience start-ups
- Centralized information
- Pipeline of talent and young entrepreneurs

Solution or Project Description

- Skill development, education, and mentoring
 Leverage existing entrepreneurship centers on campuses to attract, train, and retain mentors who will offer actionable feedback and personalized guidance.
- Increase technical Assistance:
 - The objective of this task is to increase the pipeline of high potential Proof of concept projects and companies. The technical Assistance to be provided incudes: Scientist/student education & Training. Business Development, Project management, Team Assessment & dynamics, careful due diligence, value proposition determination,
- Access to business accelerator facilities and capital for company creation.
 All successful projects will be eligible for BioAccel's commercialization programs which provide seed capital, business and technical assistance, and affordable facilities for start-up companies.

- 20 student projects, teams of 5, in conjunction with UC Irvine.
- Currently supporting 15 portfolio companies with funding and access to partners/technical assistance.
- Impacting major universities to provide access, education, and support to young entrepreneur.







BUILDING A 21st CENTURY GOV

Problem or Opportunity

When you look at the transformation happening in nearly every industry and sector, startups are leading the way. Yet the
public sector is one of the few remaining areas that have yet to be transformed by startups. There are a number of
reasons for this but we believe one of the most critical barriers is not understanding the needs of government
organizations

Solution or Project Description

 STIR connects the public sector directly to innovative technology entrepreneurs to help solve challenges faced by City government, and make government more accountable, efficient and responsive.

- 27 challenge statements proposed by City departments such as Economic Development, Fire, Human Services, Police,
 Fire, Recreation and Parks in San Francisco, Oakland, San Leandro and West Sacramento
- Streamlined the procurement process in San Francisco, so that post- 16-week program, the government agencies and startups have the potential to enter into a commercial arrangement
- 85 startups from around the world applied to these challenges
- 14 startups selected for the 2016 program
- Over 30 notable thought leaders who serve as "Ambassadors" and "Mentors"



DEVELOPMENT OF A HIGH STRAIN RATE METAL FORMING COMMERCIALIZATION CENTER



Southern Tier Startup Alliance

Opportunities

- Reshoring of manufacturing jobs related to metal component manufacturing.
- Reduction of current manufacturing costs and turn-around times.
- Reduction of the amount of energy required to manufacture metal components.

Solution or Project Description

- Commercialization of High Velocity Metal Forming (HVMF) technologies.
- Creation of a consortium that will collectively demonstrate real world HVMF applications.
- Development of an education program describing the cost saving potential of HVMF technologies.

- Make available a prioritized list of HVMF research experiments conducted at the OEAMC.
- Create a library of technical literature and promote its availability.
- Maintain a database of HVMF supply chain vendors.