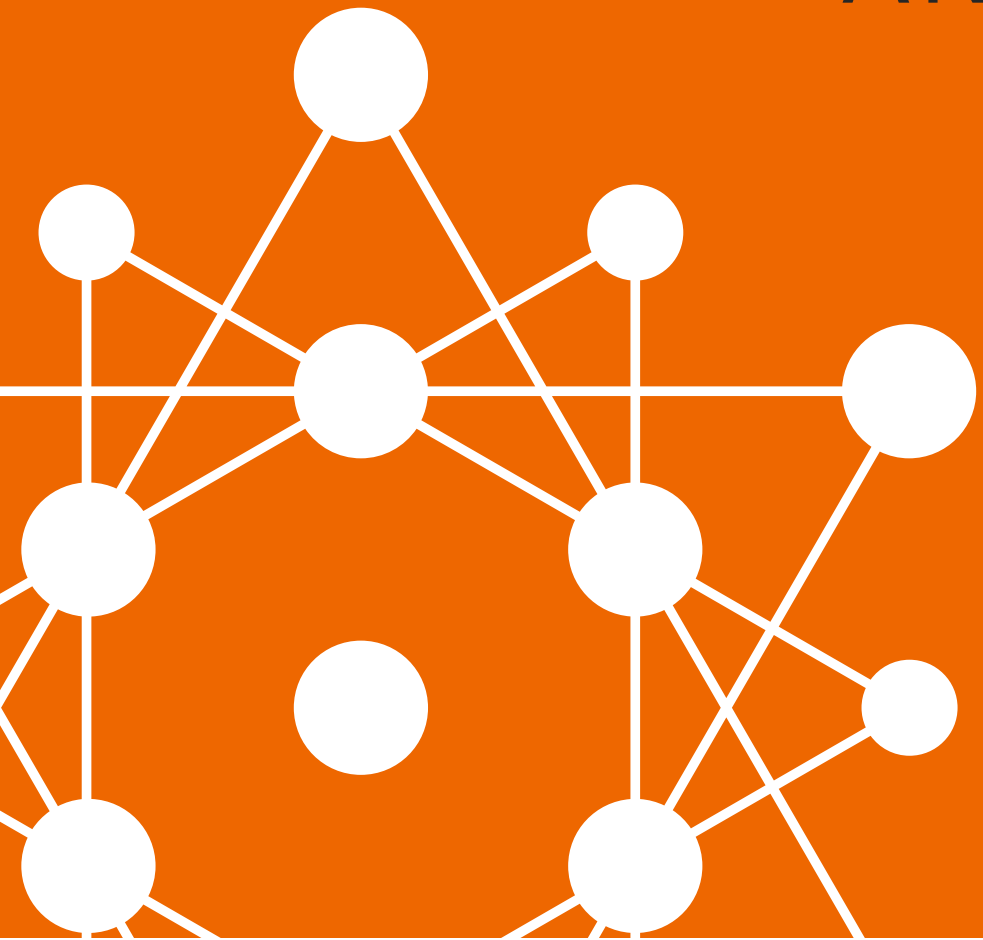
USTAR ANNUAL REPORT



GREG BELL
CHAIRMAN, USTAR GA
Ivy Estabrooke, PhD
Executive Director

USTAR VISION AND MISSION

Utah Vision: Utah will lead the nation as the best performing economy, and be recognized as a premier global business destination.

USTAR Vision: Build a robust innovation ecosystem in the State of Utah.

USTAR Mission: USTAR's mission is to accelerate the commercialization of science and technology ideas generated from the private sector, entrepreneurial and university researchers in order to positively elevate tax revenue, employment and corporate retention in the State of Utah

Key USTAR TASKS:

1. Support technology entrepreneurs and Innovators through training, funding, incubator and accelerator programs
2. Broker technology transfer by connecting capital, management and industry
3. Address market gaps in Utah's technology ecosystem
4. Strengthen Utah research capacity.

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BUILDING AN INNOVATION ECOSYSTEM

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FY16 YEAR IN REVIEW

- STATUTORY CHANGES
  - Program structure
    - Competitive grant programs
  - Metrics and Reporting
    - New metrics for universities and companies
    - Universities responsible for their reporting

- NEW COMPETITIVE PROGRAMS
  - Piloted new programs

- FORMALIZED AGREEMENTS WITH UNIVERSITIES
  - Leases
  - Salary tails

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NEW COMPETITIVE FUNDING PROGRAMS in FY17

- Technology Acceleration Program (TAP)
  - Pre-seed fund for technology development
  - Primarily start-up companies
- Industry Partnerships Program (IPP)
  - Address technology gaps for Utah Industry
  - Matching funds for research to address the gap
- USTAR Technology Acceleration Grants (UTAG)
  - Competitive funding for technology prototyping and development
  - Evaluation includes market analysis and technology feasibility
- Science & Technology Initiation Grant (STIG)
  - Available to university researchers for precursor organizational activities required to pursue larger, more commercially-oriented federal grants
  - Provides competitive funding for interdisciplinary and multidisciplinary teams for initial experimentation and data generation to compete for large federal R&D grants or industry contracts

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METRICS: COLLECTION METHODOLOGY

- UNIVERSITY METRICS
  - Data request made for the metric data listed in statute
  - Universities provided data
- COMPANY METRICS
  - 3rd party survey of all companies that USTAR worked with OR that licensed USTAR technology from one of the universities
  - Aggregated data provided to USTAR
  - All data is self-reported
- USTAR
  - 3rd party used data from universities and survey to calculate USTAR impact using IMPLAN modeling

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METRICS: UNIVERSITY PERFORMANCE

	University of Utah*		Utah State University	
	Principal Researchers	Non-USTAR Building Occupants	Principal Researchers	Non-USTAR Building Occupants
Publications	268	N/A	50	N/A
Collaborations	486	N/A	109	N/A
Disclosures	26	8	4	1
Patents (Filed and Issued)^^	57	2	0	0
License Agreements	7	0	0	0
Research Jobs (total/ non-student)	302/139	N/A	123/45	N/A

^^ Patent data includes those filed domestically and internationally and may reflect multiple patents for the same technology.

^^^ Research jobs total included anyone paid for work within the principal researchers group. This included undergraduates, graduate students who are paid a stipend in addition to a tuition waiver, post-doctoral fellows and staff positions. This did not include those identified as collaborators. The non-student number is total jobs not including graduate students, undergraduates and work-study assistants.

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METRICS: UNIVERSITY FUNDING

	University of Utah*		Utah State University	
Total USTAR Funding		**$9,358,999.51**		**$4,907,116.24**
	Principal Researchers	Non-USTAR Building Occupants	Principal Researchers	Non-USTAR Building Occupants
Number of Principal Researchers	36**	14	6	6
Total Non-State Funding for Salaries	$1,282,739	N/A	$191,178	N/A
Federal Funding	$15,555,467	$5,341,906	$1,270,603	$233,337
Industry Funding	$2,696,737	$160,578	$182,712	$352,187
Philanthropic Funding	$1,442,130	$255,512	$43,256	$0
State grant funding (non-USTAR)	$287,069	$535,390	$0	$0
Total External Funding^	$19,981,403	$7,839,395	$1,496,571	$585,524

*The University of Utah (the U) provided all budgetary data on the fiscal year. Some of the other data was collected on the calendar year.

**Summary data includes 36 U faculty and three centers funded with USTAR funding. This reflects all faculty at the U that have an active memorandum of understanding (MOU) that commits USTAR support (32) and those that were recruited with an MOU that has now expired (4). Of the 36 researchers two have left the U but did have patents or funding reported by the U for this year.

^ Funding numbers provided by the U were expenditures, USU provided grants received.

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METRICS: PRIVATE ENTITY LICENSEES

	University of Utah	Utah State University
Number of Licenses	16	12
Respondents (rate)	12 (75%)	5 (42%)
Funding raised	$3,485,000	$44,685
New Sales	$200,000	$3,100,000
New Jobs (FT)	7	0
New Jobs (PT)	6	0
Pre-revenue Companies	7	0
Revenue < $500,000	1	1
Revenue > $500,000	2	4

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METRICS: PRIVATE ENTITIES

Respondents	157
Funding raised	$19,128,685
New Sales	$5,320,000
New Jobs (FT)	54
New Jobs (PT)	45
New wages from jobs	$5,920,600
Pre-revenue Companies	53
Revenue < $500,000	43
Revenue > $500,000	32

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USTAR IMPACT: IMPLAN ESTIMATE

- IMPLAN estimates the direct impact on State and local taxes based on the impact data.

	Tax Impact*
University Impact	$1,144,738
University Licensees Impact	$320,000
Private Entity worked with USTAR Impact	$1,600,487
Total Impact	$3,065,295

* Tax impact is an estimate

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LOOKING AHEAD IN FY17

- Four new competitive grant programs
  - Technology Acceleration Program
    - Pilot funded 12 companies
    - Received 155 applications in first round, currently under review
  - University Technology Acceleration Grants
    - Received 77 applications from universities across the State
  - Industry Partnership Program
    - Opens this week
  - Science and Technology Initiation Grants
    - Opens this week
- Expanding state wide services for technology entrepreneurs
- Reopening of aerospace/advanced materials incubator

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TARGETED TECHNOLOGY SECTORS FOR FY17 PROGRAMS

Automation and Robotics/Internet of Things provides engineering solutions for simple and complex industrial applications.

Aerospace areas for research include aerodynamics, materials, autonomy or artificial intelligence.

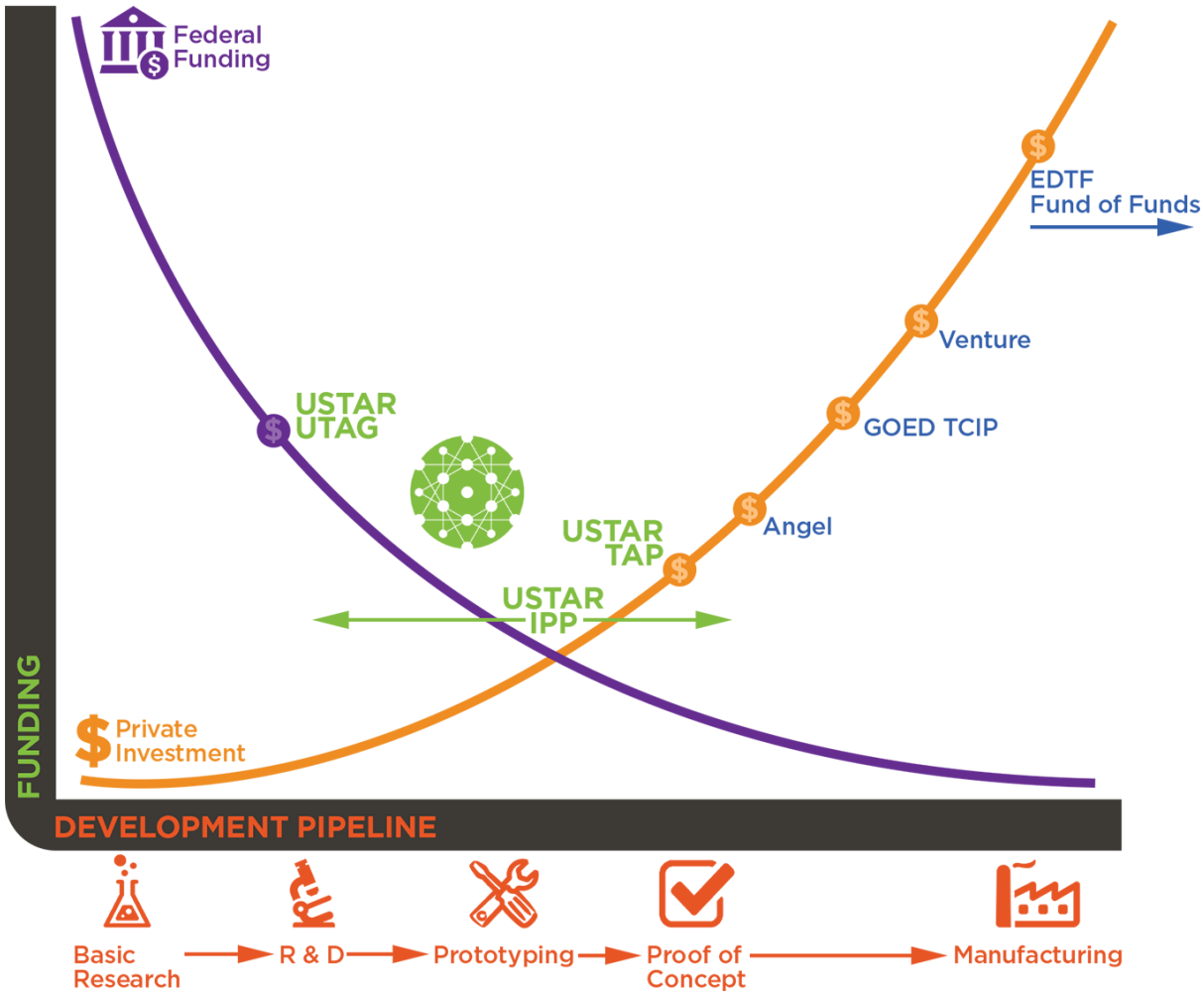
Advanced Materials include methods of developing, manufacturing or applying synthetic or advanced materials to improve the human/environment interaction. This includes precision manufacturing, new materials, carbon composites and 3D printing advances and outdoor product technology such as climate control, solar technology, water purification, sports, and recreation equipment and textiles.

Big Data term for data sets that are so large or complex that data processing applications are inadequate. Challenges include analysis, capture, data curation, search, sharing, storage, transfer, visualization, querying and information privacy.

Energy, Clean Tech and Natural Resources encompasses a diverse range of products, services and processes that harness renewable and nonrenewable materials and energy sources to dramatically reduce the use of natural resources, cut or eliminate emissions and waste and provide options for efficient energy storage.

Life Sciences includes scientific advancements that focus on improving the quality and standard of life. This includes but is not limited to medical device development, biotechnology, pharmaceuticals, diagnostic, agriculture, genetics and healthcare IT.

UTAH FUNDING ECOSYSTEM



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THANK YOU FOR LISTENING

Find Us Throughout the State

USTAR HQ Office

60 E. South Temple, Third Floor
Salt Lake City, Utah 84111
801.583.8622

CLEARFIELD

Coming Soon to Falcon Hill
385.226.8457

PROVO/OREM

815 W. 1250 South
Orem, Utah 84058
801.863.2720

ST. GEORGE

35 N Main Street,
St. George, Utah 84770
435.216.8364

ENERGY

423 Wakara Way, Suite 300
Salt Lake City, Utah 84108
801.585.9690

SBIR-STTR Assistance Center

SLCC – Miller Campus
Corporate Partnership Center
9750 South 300 West Suite 214
Sandy, Utah 84070
801. 957.5249

USTAR Life Science Incubator

2500 S State St Rm. 224
South Salt Lake, Utah 84115
385.646.4625

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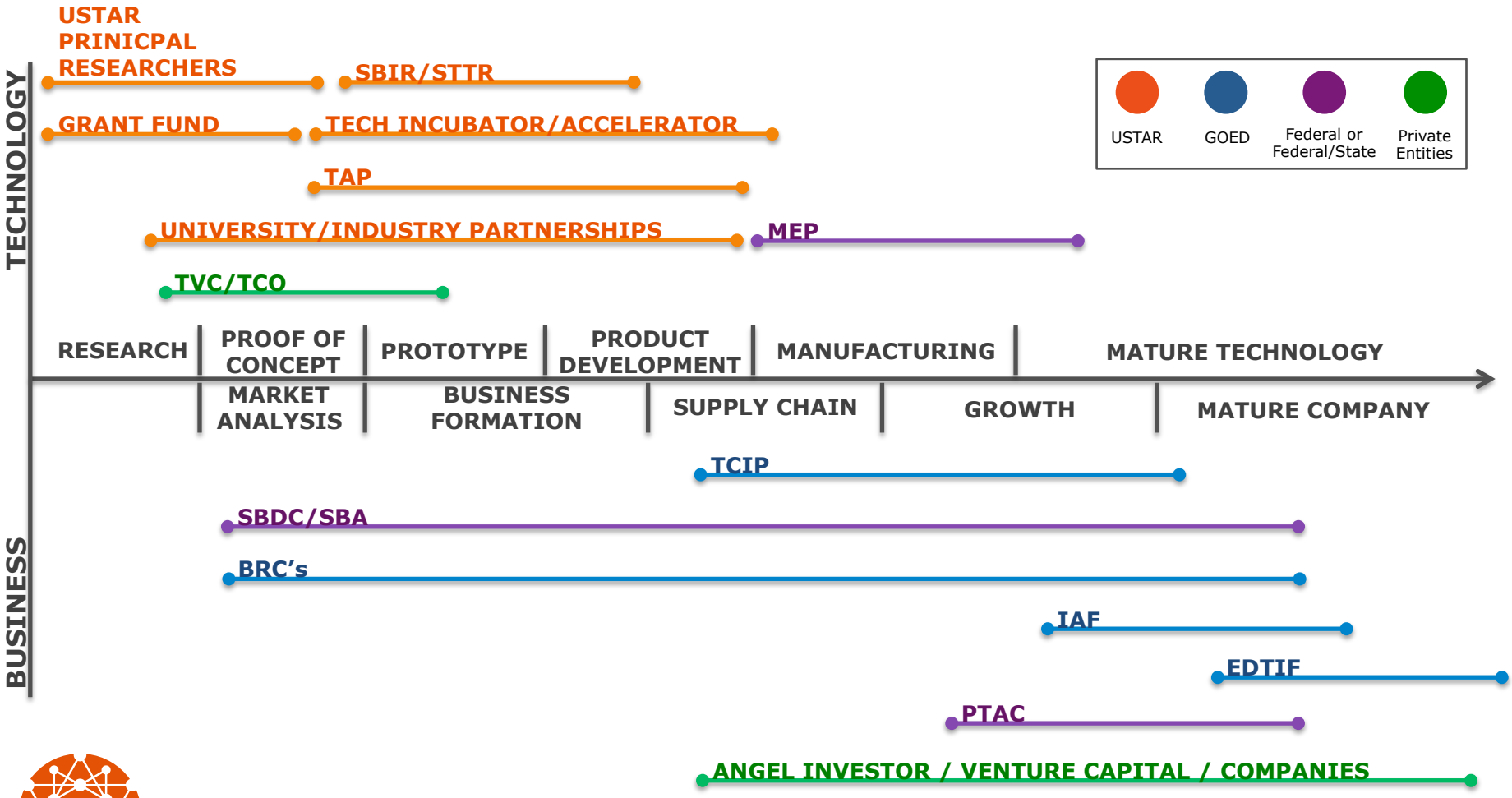
ECONOMIC DEVELOPMENT RESOURCES FOR TECH



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