



UConn 's Role as an Economic Development Engine for Connecticut

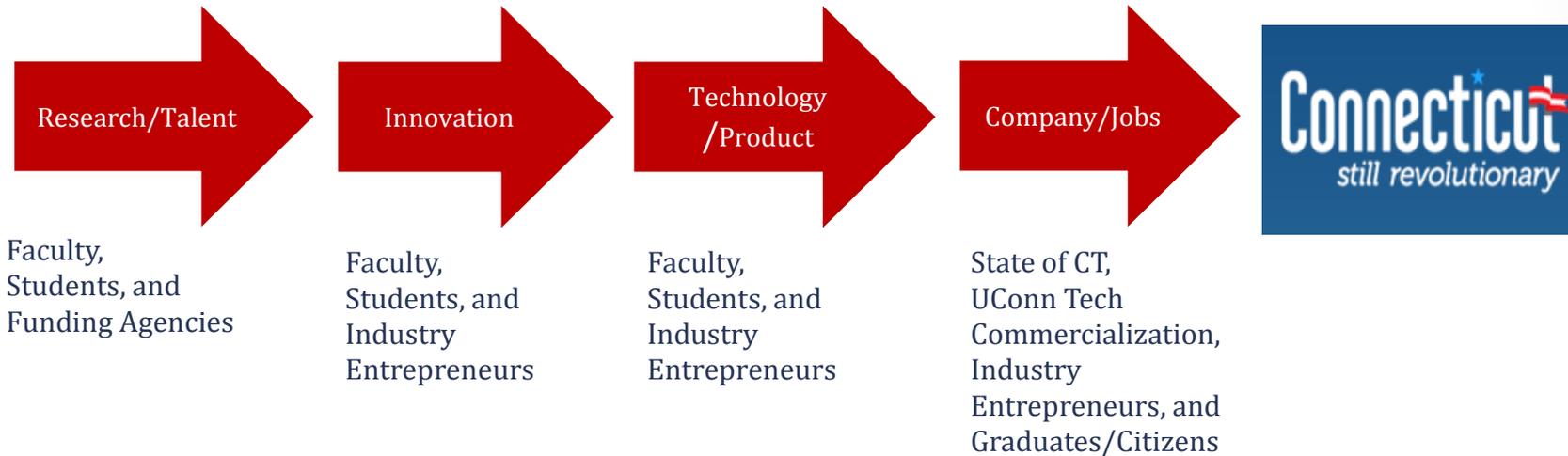
Jeff Seemann, Vice President for Research

Commission on Connecticut's Future

July 28, 2014

Office of the Vice President for Research

UConn's Role and Key Players



Research + Talent + Market Input = Jobs

CASE 2012

Office of the Vice President for Research

Research and Technology Development

Support research growth, accelerate technology commercialization, and strengthen industry support and UConn economic impact.

- Research development
- Tech commercialization
- New company creation
- Corporate and business relations

Research Support

Services required for research integrity

- Research compliance
- Environmental Health and Safety
- IT and informatics
- Animal care
- Grants and contracts management
- Research Cores

Research Centers

Promote and support multidisciplinary research

- BECAT
- SEAGRANT
- CESE
- NURC
- CHIP
- CIRCA
- CAGT
- BBC

Why OVPR?

Research = Economic Value

- 2/3 of GDP growth is driven by STEM innovations
- Median income of CT residents with STEM degrees earn \$11K more per year than graduates with other degrees
- Every \$1M in NIH research funding supports 15 jobs (salary of \$60K)
- Each new science/technology job creates more than one additional job
 - A chemical manufacturing job creates 3.1 additional jobs
 - A computers & electronics job creates 1.3 additional jobs
- For every new research \$1, CT will gain \$1.95 in business activity
- Every \$2M in research expenditures yields a patent

Source: UConn and Governor's presentation to legislature on STEM/Next Gen

University of Connecticut Total Research Expenditures By Campus, FY2007- FY2013



Next Generation Connecticut

\$1.5B capital investment over 10 years

S.B. 840 - Purpose of the construction, renovations, infrastructure and equipment are to:

Develop preeminence in the University of Connecticut's research and innovation programs

Hire and support outstanding faculty

Train and educate graduates to meet the future workforce needs of Connecticut

Initiate collaborative partnerships with industries that lead to technological breakthroughs

BIOSCIENCE CONNECTICUT

Jobs Today, Economic Growth Tomorrow, Innovation for the Future

Plan Objectives

- Renovate existing UConn Health facilities to increase research capacity and productivity
- Increase the number of basic and clinical/translational scientists to substantially increase research capacity and innovation
- Foster new bioscience related business ventures and start-ups
- Expand technology incubator facilities to support new business start-ups
- Establish new JAX partnership focused on systems genomics & bioinformatics for understanding causes and cures for human disease

Economic Development is a Campus wide Endeavor



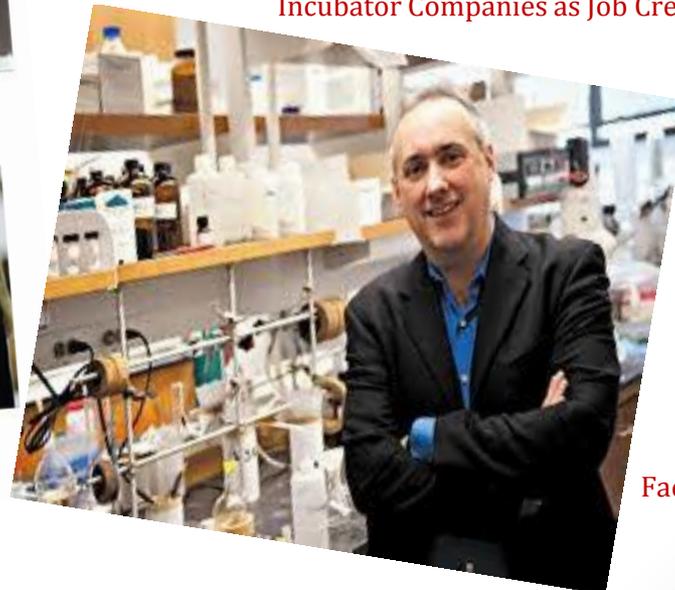
Provost as Tech Park Lead



Incubator Companies as Job Creators



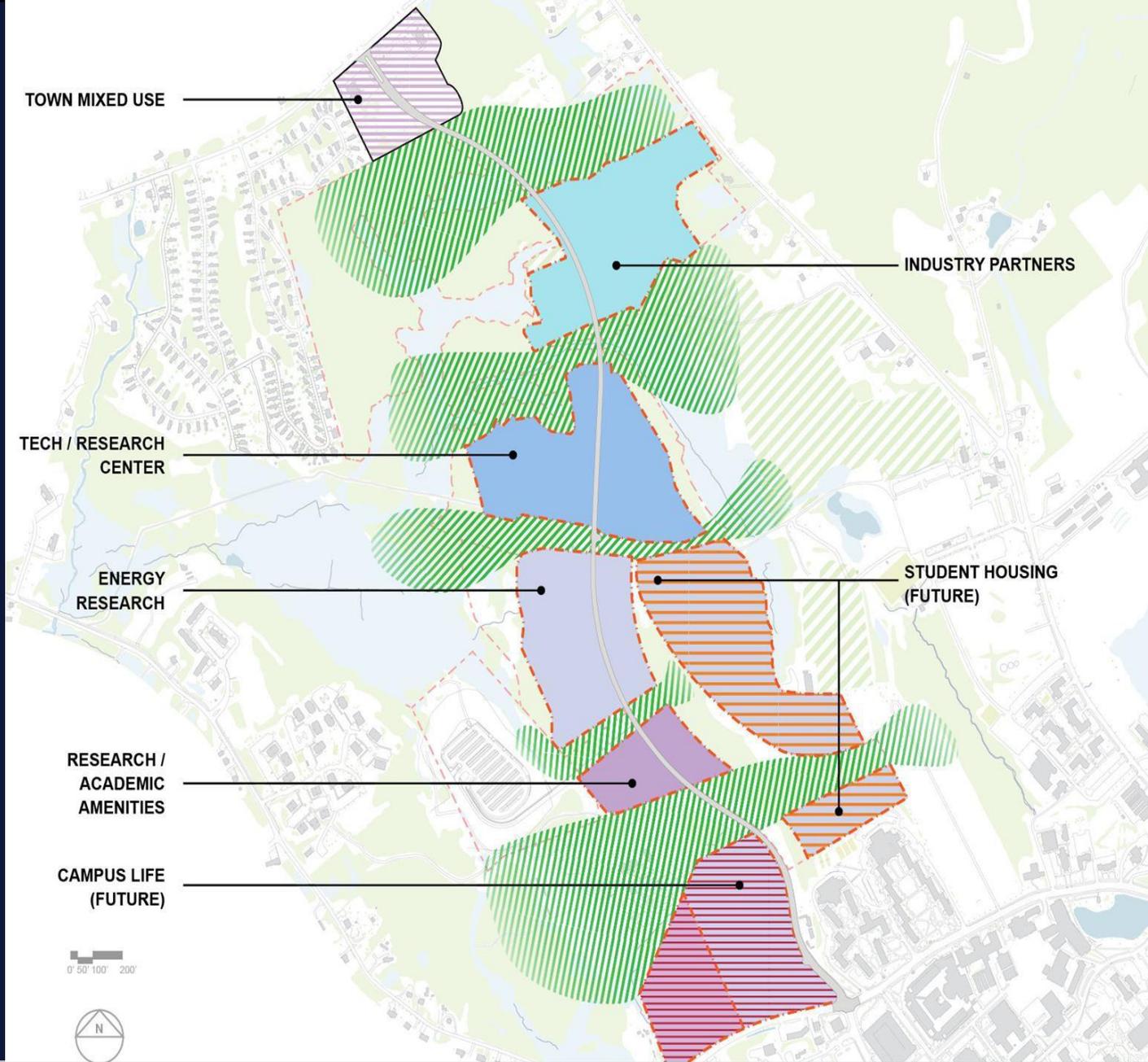
Student Entrepreneurs



Faculty Inventors

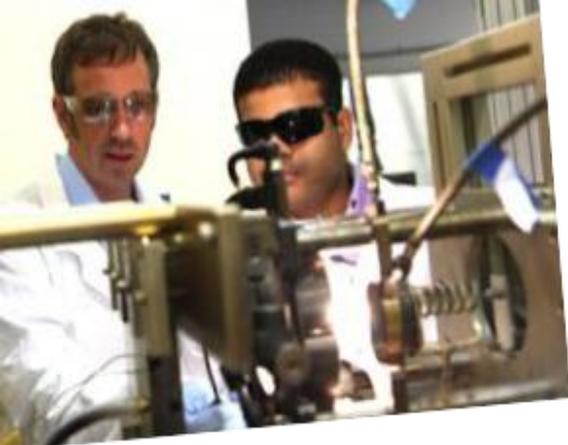
TECH PARK MASTER PLAN

Best-Use Strategy



UConn Innovation Partnership Building





Benefits of the Tech Park

State

- Keep firms in Connecticut
- Grow our entrepreneurial environment

UConn

- Enhance the research productivity and industry engagement of faculty
- Leverage rich academic programs
- Serve as key technology development partner for state & federal funding

Industry

- Encourage entrepreneurs and startup companies
- Access to high-tech equipment for R&D
- Access to talented students – workforce pipeline
- Research Collaborations (e.g. SBIR's, consulting, sponsored research)



Tech Park Anchors



Pratt & Whitney

A United Technologies Company



**Northeast
Utilities**



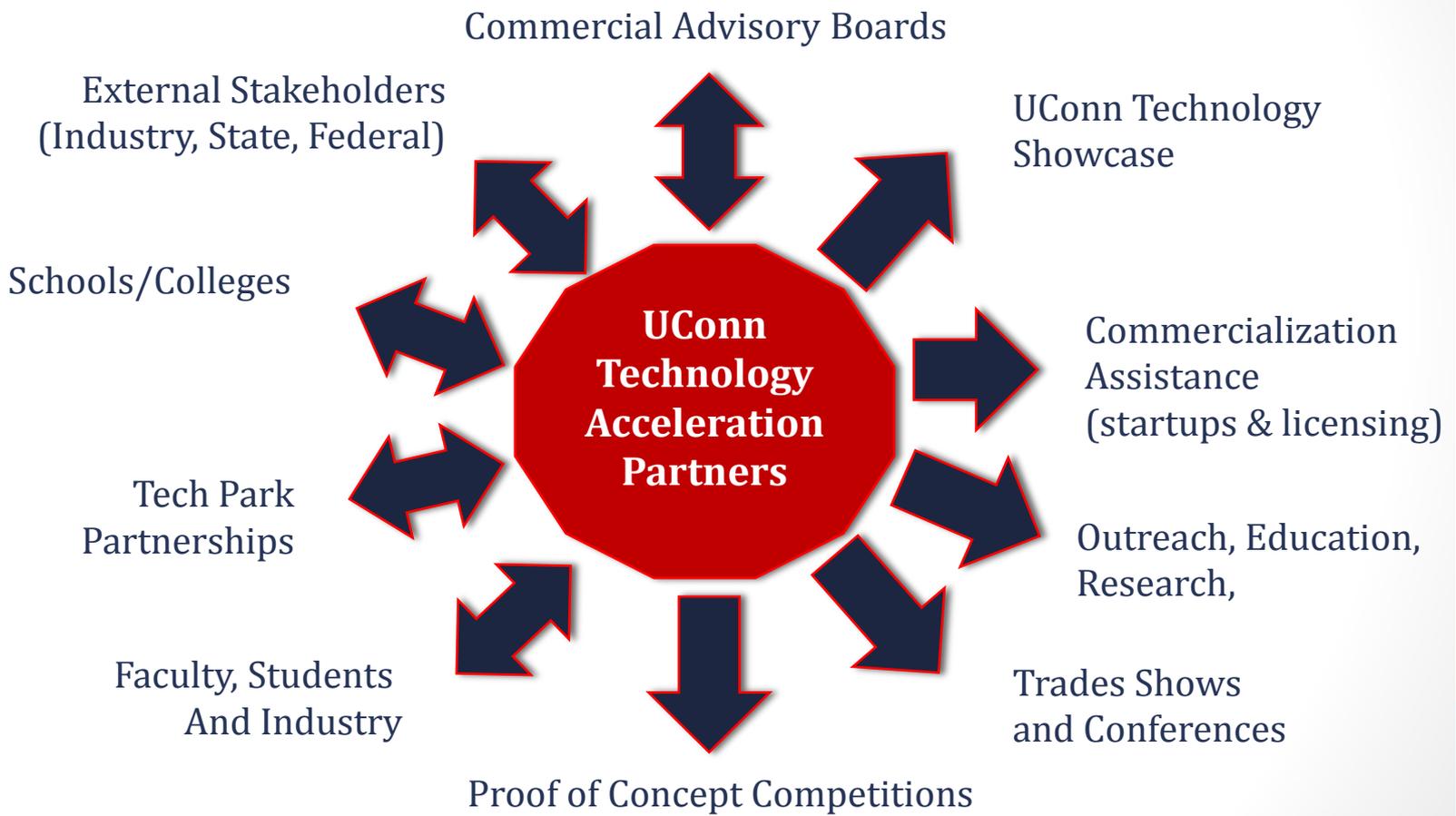
**United
Technologies**



UConn

- **General Electric:** Advanced Materials (Electrical distribution)
- **Pratt & Whitney:** Additive Manufacturing and Innovation Center.
- **Fraunhofer:** Energy Materials
- **Northeast Utilities:** High Performance Storm Damage Prediction
- **UTC:** Advanced Systems Engineering
- **Comcast:** Partnership with CHASE for hardware security (Center for Excellence in Security Innovation)

The Mission: Accelerate UConn's Technology Transfer/Commercialization Success and Drive CT's Economic Growth



UConn Technology Commercialization Examples

Company	Technology
ImCorp	Faculty Start up , Manchester, CT Technology platform discovered at UConn, Federal research support and self funded company Detects breakage in underground utility cables, global market Inc. Magazine's 5000 Fastest Growing Company five years running
Amastan	Amastan – MIT- UConn Faculty Collaboration Technology solutions centered on plasma technologies Federal research support and \$5.5 million from Launch Capital, LLC and local angel
DuraBioTech	DuraBiotech Student/Faculty Startup Heart valve design technology developed at UConn improves transcatheter heart valve durability Federal research support, UConn IQ, Pathfinder and Third Bridge Awards



OVP's Technology Acceleration Partners

Leading Commercialization at UConn with Easy Access and Strong Partnerships



Entrepreneurial Education

Incubation Space and Services

IP Identification, Protection and Marketing

Industry Outreach & Investor Relationships

Proof of Concept Competitions

Startups & Licensing



UConn

Office of the Vice President for Research