

FIVE-YEAR ACCOMPLISHMENTS REPORT 2020–25

Platforms, Proof Points, and Institutional Value

INTRODUCTION

Over the past five years, the ETSU Research Corporation has evolved into a central enabling entity for applied research, workforce development, industry engagement, and regional and national partnerships. The ETSU Research Corporation operates at the intersection of the university, government, industry, philanthropy, and community, providing ideation and operational capacity to move complex initiatives from concept to execution beyond traditional academic structures. It has also served as the administering entity for several grants that, due to eligibility or structural constraints, the university was not able to receive directly.

Enduring platforms organize the accomplishments below. Together, they document how the ETSU Research Corporation strengthens ETSU's partnership brand and enables complex collaboration at scale. Collectively, these platforms position the ETSU Research Corporation as a trusted front door and connector for external partners, translating external opportunity into coordinated, university-wide engagement.

BUILDING THE INFRASTRUCTURE FOR INNOVATION

PLATFORM 1 Talent Architecture, IP Enablement, and Integrated Operating Capacity

This platform provides the enabling layer for everything that follows. One of the ETSU Research Corporation's most consequential contributions has been the recruitment and alignment of professional staff and senior leadership with deep domain expertise, while also facilitating and amplifying the work of faculty and student talent across ETSU through applied infrastructure, partnership pathways, and operational support. This capacity underpins each of the platforms that follow, allowing the ETSU Research Corporation to operate as a coordinated system rather than a collection of discrete initiatives.

As a university-aligned, legally separate entity, the ETSU Research Corporation operates with greater speed, flexibility, and transactional agility, including contracting, partnership structuring, and deal execution, resulting in timely engagement with industry and public partners while remaining aligned with ETSU's mission and governance expectations.



► **Consistent engagement of exceptional student interns and graduate capstone students over the past five years**

- *Students have supported research translation, storytelling, marketing, events, ecosystem development, operations, and convenings.*
- *Several have progressed into advanced academic programs or regional professional roles.*

► **Active membership in the Tennessee Technology Transfer Advancement Consortium**

**MORE THAN \$450,000 IN TTAC
FUNDING SECURED TO DATE**

Key talent enabled and supported (illustrative, not exhaustive):



Eric Jorgenson

Vice President for Biomanufacturing

Industrial biotechnology and manufacturing scale-up expertise

Operational leadership of the ETSU/Eastman Valleybrook transformation



Dr. Betsy Cunningham

Director of Operations

Operational coordination across finance, compliance, contracting, and reporting

Navigation of university processes, enabling initiatives to move from concept to execution



Dave Clark

Vice President for Entrepreneurial Ecosystem Development

Regional startup and scale-up ecosystem development

Leadership of the region's first member-managed investment fund



Dr. Stephen Marshall

Chief Marketing Officer, ETSU Research Corporation

External narrative coherence and partnership positioning

Strategic communications supporting ETSU's research and innovation profile



Allison Myers

Executive Director of StoryCollab

National and international work in research, workforce, and public-interest storytelling

Leadership of applied storytelling partnerships across health, education, veterans, and culture



Dr. Audrey Depelteau

Director, ETSU Innovation Laboratory (iLab)

Leadership of nationally recognized Soft Landings programming

Management of applied innovation, founder onboarding, and company attraction initiatives



Jon Wood, J.D.

Chief Intellectual Property Officer

Intellectual property strategy and commercialization alignment

Support for industry-facing research, licensing, and technology transfer



Dr. Katie Houston

Director of Commercialization

Industry experience in innovation strategy, intellectual property, and applied R&D

Support for translating university research into industry-facing collaborations



Mark Bays

Director, Tennessee Small Business Development Center at ETSU

Leadership of small business advising and entrepreneurial assistance across the region

Coordination of ETSU-administered funding and operational support for regional economic development partners, including the Kingsport Office of Small Business and Entrepreneurship



David Golden

Chief Executive Officer, ETSU Research Corporation

Overall stewardship and coordination of the ETSU Research Corporation's activities

Integration across university leadership, faculty, staff, students, external partners, and public stakeholders

DEVELOPING **TOMORROW'S** WORKFORCE

PLATFORM 2 **STEM, Bioeconomy, and Advanced Workforce Pipelines**

The ETSU Research Corporation has focused on building long-horizon workforce pipelines aligned with emerging industries. These include synthetic biology, advanced manufacturing, robotics, the bioeconomy, and the creative economy, with an emphasis on ecosystem capacity, applied experience, and student-to-industry pathways.



Key proof points:

► **Statewide BioSTEM and synthetic biology education initiative**

- *An ongoing initiative developed with the Niswonger Foundation*
- *Implemented in partnership with the BioBuilder Foundation, a spin-out non-profit from MIT*

\$8.8 million FEDERALLY
SUPPORTED STEM INITIATIVE

► **Development and launch of ETSU's competitive STEM teams**

- *Establishment of ETSU's Marine Advanced Technology Education (MATE) student team*
 - *Multiple appearances at MATE ROV World Championships*
- *Establishment of ETSU's iGEM team*
 - *Inaugural international competition appearance in Paris*

► **Engineering, mechatronics, and robotics workforce infrastructure**

- *Hosting the MATE ROV World Championship*
- *ETSU hosting MATE Regional competitions*
- *Robot Drone League programming delivered through STREAMWORKS*

► **Valleybrook as a workforce development asset**

\$3.3 million BIOMADE
WORKFORCE DEVELOPMENT GRANT

- *Valleybrook houses the MATE Store, a critical component of the global MATE supply chain*
- *Creation of paid student jobs in logistics and operations*
- *Creation of MATE Store Manager Position*
- *Housed Prototype BioBuilder Learning Lab*
- *Houses the STREAMWORKS/NISWONGER STEM-GYM*

► **Music and creative economy workforce engagement**

- *Partnership with Music for All, the largest music advocacy non-profit in the United States*
- *Engineered the return of a Bands of America Regional Championship to ETSU campus in furtherance of local music ecosystem and supporting tourism, hospitality, and regional economic activity.*

► **Workforce policy and thought leadership**

- *Engagement with Tennessee SCORE as a thought partner on workforce and innovation policy*

ENGAGING ON THE **NATIONAL** STAGE

PLATFORM 3 National Policy Engagement, Manufacturing, Defense, and Industrial Synthetic Biology Scale-Up

This platform reflects ETSU's transition from participation to execution in national manufacturing, biotechnology, and defense-aligned innovation.

Key proof points:

- ▶ Growing the Future: Symposium on Innovation and Education for the Bioeconomy at ETSU in October 2022
- ▶ ETSU Research Corporation CEO gives formal testimony before the Commission in April 2024
- ▶ Hosting the National Security Commission on Emerging Biotechnology (NSCEB) on the ETSU campus in August 2025
- ▶ Invitation to participate in the NSCEB State Symposium in March 2026 in Washington, DC
- ▶ Invitations for ETSU Research Corporation leadership to speak at national bioeconomy and biotechnology forums, including SynBioBeta

Valleybrook Applied Innovation Complex

- ▶ Property condition at assumption of responsibility: Severely underutilized and largely configured for storage rather than active research or industry engagement
- ▶ Transformation under Eric Jorgenson's leadership: Cleanup, removal of accumulated materials, and laboratory buildouts
- ▶ Current state: An emerging applied innovation complex capable of supporting federally funded and industry-aligned work

Manufacturing and defense execution:

- ▶ Institutional membership in BioMADE

**PARTICIPATION IN A \$3.3 million
LAB BUILDOUT AND WORKFORCE
DEVELOPMENT GRANT**

- ▶ Active participation in the Defense Industrial Base Consortium (DIBC)

\$912,000 DIBC-FUNDED PROJECT

- ▶ Six-figure applied research and industrial scale-up activity performed under nondisclosure agreements

Aligned public investment:

- ▶ \$465,000 Appalachian Regional Commission grant
- ▶ Approximately \$715,000 secured with the First Tennessee Development District
- ▶ \$2.5 million Tennessee Department of Economic and Community Development investment
- ▶ \$2.5 million forthcoming gubernatorial allocation



TURNING IDEAS INTO INVESTMENT

PLATFORM 4 Entrepreneurial Ecosystem Development, Capital Formation, Innovation, Industry Recruitment and Enablement

Building on this national engagement and execution capacity, the ETSU Research Corporation has coordinated a regional ecosystem aligning innovation, capital, talent, and infrastructure into a coherent front door for founders, scaling companies, and relocating industry.



Key proof points:

- ▶ Creation of the region's first member-managed regional investment fund
- ▶ Launch of the 2681 Accelerator
- ▶ Nationally recognized Soft Landings program through the ETSU iLab

RECEIVED A
\$1 million
GRANT TO ESTABLISH THE
APPALACHIAN HIGHLANDS
RURAL INNOVATION AND
ENTREPRENEURSHIP ALLIANCE

Industry enablement:

- ▶ Invitation to participate as a partner in the proposed \$100 million CAMR application
- ▶ Facilitated major private investments
 - Highland Materials (\$500 million)
 - Frisbie Group (\$1.5 billion planned)

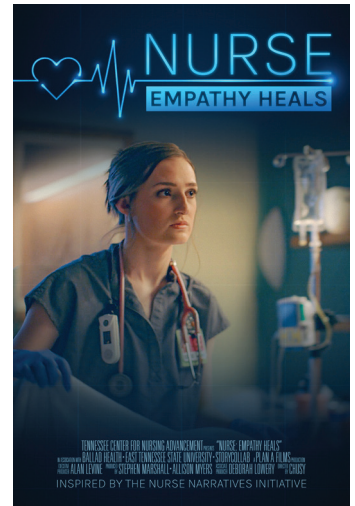
Partners and collaborators include:

- ▶ East Tennessee State University
- ▶ Appalachian Regional Commission
- ▶ Bank of Tennessee
- ▶ Ballad Health
- ▶ BAE Systems Ordnance Systems
- ▶ BioBuilder Educational Foundation
- ▶ BioMADE
- ▶ Bristol Chamber of Commerce
- ▶ City of Kingsport
- ▶ The Defense Industrial Base Consortium
- ▶ First Tennessee Development District
- ▶ The Frisbie Group
- ▶ Greene County Partnership
- ▶ Highland Materials
- ▶ Johnson City Chamber of Commerce
- ▶ Kingsport Chamber of Commerce
- ▶ Launch Tennessee
- ▶ Marine Technology Society
- ▶ NETWORKS Sullivan Partnership
- ▶ Niswonger Foundation
- ▶ Northeast State Community College
- ▶ Plan A Films
- ▶ SyncSpace
- ▶ Tennessee Department of Economic and Community Development
- ▶ Tennessee Entertainment Commission
- ▶ Tennessee Hills Distillery
- ▶ TNSCORE
- ▶ United States Department of Defense
- ▶ US Antibiotics
- ▶ Washington County, Tennessee
- ▶ City of Kingsport
- ▶ Visit Johnson City
- ▶ Woods Hole Oceanographic Institution
- ▶ STREAMWORKS

WHERE **PARTNERSHIPS** TAKE SHAPE

PLATFORM 5 Convenings, Storytelling, and Enhancing ETSU's Partnership Capacity

The ETSU Research Corporation serves as a central connector and narrative integrator, shaping how ETSU is perceived and accessed by external partners.



StoryCollab platform:



- ▶ **Nurse Narratives Initiative and Nurse Documentary with Ballad Health and the Tennessee Center for Nursing Advancement**
- ▶ **Cancer screening storytelling project with the Centers for Disease Control and Prevention**
- ▶ **Maternal health storytelling with the Indiana Department of Health**
- ▶ **Cultural heritage storytelling with the Ainu people of northern Japan and Syracuse University**
- ▶ **Projects with Vanderbilt Health and systems in Florida**
- ▶ **Projects with the U.S. Department of State**
- ▶ **Global education and study-abroad storytelling**
- ▶ **Voices of Valor veteran storytelling initiative supported by the NEA**

Creative economy:

- ▶ **Northeast Tennessee Music Census / Appalachian Music Collective**
 - *Partnership with Tennessee Entertainment Commission in the Governor's office*
 - *Regional music census with more than 1,200 responses and over 100 community partners*
 - *Identification of music-driven economic development, workforce, and tourism opportunities*
 - *Formation of the Appalachian Music Collective (2026) to respond to opportunities*

Strategic philanthropy:

- ▶ **Longstanding partnership with the Niswonger Foundation**

BlueSky Tennessee Institute:

- ▶ **Early enabling role played by the ETSU Research Corporation**
- ▶ **Execution led by the College of Business and Technology under Dean Dr. Tony Pittarese**

LONG-HORIZON OPPORTUNITIES

PLATFORM 6 Future-Facing Opportunities for University-wide Engagement and Regional Impact

The ETSU Research Corporation is increasingly positioned to support long-horizon, multi-sector opportunities that require sustained coordination across academia, industry, government, and philanthropy. These opportunities are not defined by any single project, but by the ability to align institutional strengths with emerging regional and national priorities over time.

Forge Mountain represents one such opportunity. As a decade-long, \$1 billion-plus private investment, it illustrates the type of large-scale, place-based initiative where the ETSU Research Corporation can serve as a connector, integrator, and enabling platform for university-wide engagement.

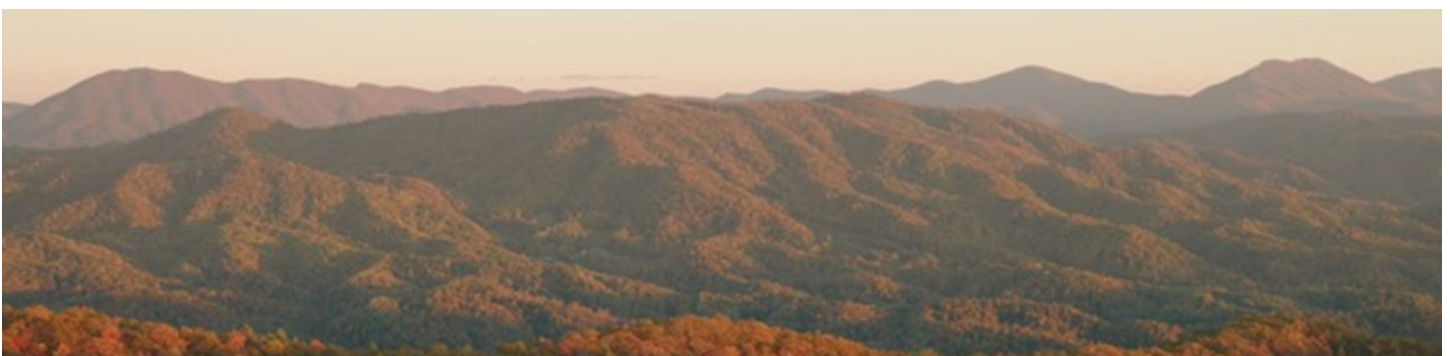
Role of the ETSU Research Corporation:

- ▶ **Connector across colleges and external partners, including public entities and non-profits**
- ▶ **Structural flexibility for long-horizon, public-private partnerships**
- ▶ **Experience translating private development timelines into coordinated academic, workforce, research, and creative engagement**

University-wide opportunity:

- ▶ **Applied sciences, advanced manufacturing, and mechatronics**
- ▶ **Health sciences, nursing, pharmacy, and the medical school**
- ▶ **Business, entrepreneurship, and workforce development**
- ▶ **Environmental science, sustainability, and land stewardship**
- ▶ **Arts, music, storytelling, and creative enterprises**
- ▶ **Education, experiential learning, and lifelong upskilling**
- ▶ **Data science, artificial intelligence, and digital infrastructure for smart communities and next-generation regional development**
- ▶ **Tourism, hospitality, and destination development linked to regional and cultural and natural assets**
- ▶ **Outdoor health, longevity science, and community wellness innovation**

Forge Mountain is illustrative of a broader category of opportunity. As similar long-horizon initiatives emerge, the ETSU Research Corporation is structurally positioned to align university capabilities with external investment, translating complex development timelines into coordinated, institution-wide participation and measurable regional impact.



Five-Year Institutional Proof Point

The ETSU Research Corporation now functions as a strategic enabling layer for university-wide innovation and external partnership.

Operating at the intersection of academia, industry, government, and philanthropy, it provides the operational capacity required to move complex initiatives from concept to execution. Over the past five years, this model has supported major workforce initiatives, national engagement in biotechnology and advanced manufacturing, entrepreneurial ecosystem development, and multi-sector collaboration across the Appalachian Highlands.

Together, these efforts demonstrate how an agile, partnership-oriented structure expands ETSU's ability to translate talent, research, and regional assets into durable economic and societal impact.

Board and Partner members:

ETSU Research Corporation Board

- ▶ **Dr. Brian Noland, Chair**
- ▶ **Dr. William Block**
- ▶ **Dr. Carol Anne Clayson**
- ▶ **Bryan Daniels**
- ▶ **David A. Golden**
- ▶ **Denise Grant**
- ▶ **Dr. Linda Latimer**
- ▶ **Kimberly McCorkle**
- ▶ **Scott Niswonger**
- ▶ **Dr. David Williams**

Innovation Catalysts

Non-Board members whose leadership, vision, and commitment have materially advanced the ETSU Research Corporation's mission and trajectory.

- | | |
|-------------------------------|------------------------------|
| ▶ Bill Greene | ▶ Dr. Natalie Kuldell |
| ▶ Alan Levine | ▶ Jill Zande |
| ▶ Scott Andrew | ▶ Dr. Kate Sixt |
| ▶ Dr. Nick Hagemeier | ▶ Jason Thompson |
| ▶ Bob Raines | ▶ Jimmy Wheeler |
| ▶ Chusy Harney-Jardine | ▶ Dr. Jonathan Clark |
| ▶ Mark Fuller | ▶ Mary Ann McNair |
| ▶ Joe Grandy | ▶ Mike Vaughn |
| ▶ Dennis Phillips | ▶ Ryan Trauman |
| ▶ Dennis Courtney | ▶ Ty Warren |



In memory of our dear friend and Research Corporation Fellow, Dr. Bill Heise. What he helped set in motion continues.