

CALL TO ACTION

North Carolina currently ranks 20th nationally in innovation commercialization and has fallen behind other innovation leaders in its ability to commercialize its world-class research base.

Why does this matter?

- Successful inventors are seeking capital, mentors, and commercialization support in other states because the state is not investing in the products of successful research on par with its R&D strengths.
- This outmigration results in lost talent, jobs, IP, and future value to the state's universities and treasury.

What is behind North Carolina's lagging performance?

- **Technology Transfer** Across its research universities, North Carolina places below the top 20 percent of *universities* in invention disclosures, new patent applications, and startups formed from 2018-2020.
- Patent Activity North Carolina places below nearly all benchmark states in patents per total R&D.
- Venture Capital Activity North Carolina invested less in venture capital funding compared to the size of its R&D base than nearly all benchmark states and below the U.S. average.
- Unequal Access 70% of the state's innovation ecosystem activities are located in just six cities.

What does North Carolina need to do to be competitive with other states?

According to TEConomy Partners, and based on successful models from other states, North Carolina should embrace a tested model for public-private partnerships. Specific steps include:

- Develop regional innovation networks to provide value-added services and connect academia, industry, and capital
- Protect and capture ROI from research assets by developing applied research collaborations across universities structured to solve marketplace problems with commercially viable solutions
- Infuse real-world business development acumen into university research efforts to help commercialize applied research
- Provide funding to accelerate applied research commercialization to create more companies and keep them and they jobs they create in NC

VALUE PROPOSITION

How will NCI deploy state investments?

- Regional innovation networks and research
- Target and incentivize applied research regionally and across NC
- Create a path to sustainability to ensure programs continue into perpetuity

What will NCI do that isn't already being done?

- Establish regional innovation networks using hub-and-spoke models to connect the state's research universities, industry partners, and the private sector, and not just in the population centers
- Target and optimize applied research that addresses marketplace opportunities
- Provide grant funding to address the "valley of death" from research success to commercial scale

What partnerships has NCI established?

- Universities: Signed MOUs with four initial regional hubs (ECU, NC A&T, UNC-Charlotte, and WCU) with their Chancellors and UNC System President Peter Hans on the NCI Board
- North Carolina Policy Collaboratory: Policy and technical support to manage applied research grants

How will NCI create value for North Carolina?

- Create companies/jobs out of university research products and keep those companies/jobs in NC
- Enhance the value of IP coming out of NC research universities (keep it in state, get it to market faster, and protect the equity stake by investing dedicated NC capital)
- Position North Carolina for new federal funding that is increasingly targeted for regional collaborations, and in areas with thriving commercialization ecosystems

What have other states seen in terms of ROI?

Three examples from NCI's research into other state models:

- **Ohio Third Frontier:** \$225 million in state investment created loan, pre-seed, and seed funds that have generated 3:1 match in private funds, leading to a 10:1 ROI and 2,500 new jobs in its initial cycle.
- Georgia Research Alliance: \$690 million in state dollars since 1991 has led to \$11.7 billion in ROI. For every \$1 the state has invested in GRA's programs, it has generated nearly \$12 in research grants to public and private universities and venture capital to university-launched startups companies.
- Indiana's BioCrossroads: 33x ROI on initial investments in 32 life science start-ups. Companies have gone on to raise nearly \$800 million in additional capital.

GOVERNANCE & RISK MITIGATION

What is NCI's governance model, and how will funding be committed?

- Established 501(c)(3) supported by more than \$23 million in private philanthropic contributions to fund core operations
- Under Board oversight, will leverage state investments consistent with UNC System research priorities
- Board of Directors comprised of representation from the public and private sectors, to include UNC System/University executives and elected official appointees
- All funding decisions will be made by experienced financial executives and successful entrepreneurs, and in consultation with university leaders from across the state

How will NCI mitigate the risks associated with early-stage funding?

- Deep engagement with inventors/emerging entrepreneurs early in their innovation life cycles
- Phased funding in the form of performance-based grants and cooperative agreements (quantitative milestones/metrics) that require successful achievement at each stage
- Active involvement and experienced mentoring in business planning, product-market fit analyses, management team selection, and related activities as precursors to venture investments

How can NCI ensure North Carolina's best ideas remain in the regions that spawn them?

As a prerequisite to grant or other funding, NCI will require representations that funded companies will
maintain a physical presence in North Carolina, with a majority of employees and leadership positions to
be based in the home region. NCI will also require claw back provisions for companies that do not fulfill
these obligations.