
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:

- Protect and capture ROI from research assets by developing applied research collaborations across universities structured to solve marketplace problems with commercially viable solutions;
- Develop regional innovation networks to provide value-added services and connect academia, industry, and capital;
- Infuse real-world business development acumen into university research efforts to help commercialize applied research; *and*
- Create university-focused seed to early-stage capital funds to capitalize ventures that stem from applied research to create more companies and keep them in NC.

SPEND PLAN & VALUE PROPOSITION

How will NCI deploy state investments?

- Regional Innovation Network and Research - \$25 million
- Target and Incentivize Applied Research Regionally and Across NC - \$117.5 million
- Fund Research Commercialization - \$100 million

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 early-stage risk capital to fund the "valley of death" from research success to commercial scale.

What partnerships has NCI established?

- **Universities:** Negotiating MOUs for four initial regional hubs (*ECU, NC A&T, UNC-Charlotte, and WCU*) with Board seats for their Chancellors and UNC System President Peter Hans
- **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 grants/investments be made?

- 501(c)(3) will serve as the fiduciary for state investments consistent with UNC System research priorities
- 36-member Board of Directors comprised of equal representation from the private sector (18 seats) and public sector (18 seats held by UNC System/University executives and elected official appointees)
- All investment decisions will be governed by a Grants/Investment Committee comprised of experienced financial executives and successful entrepreneurs from across the state

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

- Deep engagement with inventors/emerging entrepreneurs early in their innovation life cycles
- Phased investments starting with tranches of performance-based cooperative agreements (quantitative milestones/metrics) that require successful achievement prior to eligibility for continued investment
- Active involvement 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?

Through non-negotiable investment terms and conditions, NCI will require:

- Information rights and Board seats or Board Observer roles
- *Pro rata* participation rights (but not obligations) to follow initial investments in subsequent funding rounds
- 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
- Claw back provisions on capital or intellectual property forfeiture in cases of breach