

# CALL TO ACTION

# North Carolina currently ranks 20<sup>th</sup> 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.