

Collaboratory COVID-19 Projects: Leverage pan-university innovation intelligence and resources through Innovate Carolina's ImpactX platform and the Institute for Convergent Science

Final Report
January 31, 2021

Abstract

The NC Policy Collaboratory was tasked with distributing Covid-19 relief funds in a way that provides maximum benefit to the state and facilitates accurate tracking and reporting of outcomes. The impact goal of this project was to provide innovation support for ICS to assist the Collaboratory in achieving applied outcomes from Covid-19 funding through increasing the quality and quantity of applied/translational research teams moving ideas to market.

The pathway toward this goal was to leverage Innovate Carolina's services, organized through the ImpactX methodology, to provide a framework and process to support applied research outcomes and to organize and catalyze researchers, employers, government agencies, and higher education institutions to align their efforts in service to the goal. ICS served as the hub that is home to the identified problems (in this case, Covid-19) and research expertise, while Innovate Carolina, implementing the ImpactX method, provided the framework and support processes to activate knowledge into applied solutions.

This project was found to be effective at 1) helping Collaboratory-funded research teams clear roadblocks to progress; 2) introducing research teams to one another to identify synergies and reduce duplicative efforts; 3) supporting identification of follow-on funding opportunities; and 4) introducing research teams to internal and external partners who could facilitate their forward progress. The project team has built important relationships with the research teams that will help us to continue supporting their work on covid-related projects in the future. We also note that our pilot implementation of ImpactX has revealed which approaches and methods were deemed most valuable among faculty so that we can continue to hone the methodology to support of future projects.

Outcomes

The ImpactX methodology is a six-stage process for helping faculty put their research projects to practical use outside the university. The stages include the following: 1) Rapid Evaluation of Projects for Impact Potential; 2) Convene Team and Establish Timeline, Milestones; 3) Assess Internal and External Landscape; 4) Research and Development; 5) Iterative Project Support; and 6) Track outcomes and measure impact. Our work with the Collaboratory-funded teams involved building relationships with teams that elected to partner with our Innovate Carolina team to receive support in these six stages listed above. In developing these relationships, we were able to determine the areas in which teams were seeking the most support and were able to provide that assistance through existing Innovate Carolina support services. The types of support we most often provided included introductions to

internal and external partners, introductions to other research teams, analyses of funding opportunities, and project management support. This six-month project resulted in the following outcomes:

- Developed and delivered three design thinking workshops for Collaboratory-sponsored faculty
- Identified varying types of follow-on support needed for teams through these workshops and subsequent interactions; facilitated access to or directly provided that support
- Created funding landscapes for 18 Collaboratory-sponsored projects to identify future funding opportunities
- Introduced Community Confidence tool (as well as NC Policy Collaboratory, Innovate Carolina, and Institute of Convergent Science) to 148 businesses and government officials across 7 NC counties (Ashe, Buncombe, Mecklenburg, New Hanover, Gates, Robeson, Wake) during the customer discovery phase
- Supported the Community Confidence team through community outreach, consulting services on marketing/promotion, customer development support, and analysis of funding opportunities
- Two articles written on Collaboratory-funded projects: Boundary Spanners ([link](#)) and DHIT Community Confidence project (in progress; anticipated publish date is 2/9/21)
- Supported development of Boundary Spanners NSF proposal

Reflection on outcomes

This project was found to be effective at 1) helping research teams clear roadblocks to progress; 2) introducing research teams to one another to identify synergies and reduce duplicative efforts; 3) supporting identification of follow-on funding opportunities; and 4) introducing research teams to internal and external partners who could facilitate their forward progress. The project team has built important relationships with the research teams that will help us to continue supporting their work on covid-related projects in the future. We also note that our pilot implementation of ImpactX has revealed which approaches and methods were deemed most valuable among faculty so that we can continue to hone the methodology to support future projects. Some of the findings that will inform our future work include the following:

- Providing ImpactX content and resources is more effective in group settings (e.g., workshops) than in one-on-one settings except in places where there is a clearly defined partnership (e.g., Community Confidence).
- Providing ad-hoc support services was another strength of the team.
- Once we demonstrated what services were available through presenting design thinking workshops, faculty followed up to get more consulting services. We learned that *showing* faculty what services are available works better than simply *telling* them.
- Connections to industry and other partners were a valuable outcome of the project.
- The project team learned that the way that this work unfolds doesn't fit neatly into a project management construct, and flexibility must be built in to accommodate the varying needs of different teams.
- These initial offerings of ImpactX services are part of a longer-term strategy of engaging faculty.

Identified areas for growth

Our project team has developed a set of observations that will inform our continued and future work with research teams that are working on moving their research toward practical applications outside the university. Perhaps most importantly, we learned the value of building relationships with the faculty teams to foster a sense of trust and help the teams understand what services are available through ImpactX/Innovate Carolina. Until this relationship has been established, the research teams will be less likely to call upon Innovate Carolina for help and will be less likely to understand what types of support they can request. Some of the ideas that came out of this project and could lead to stronger engagement with research teams include 1) better integrating staff into workshop offerings so that faculty understand the various roles of Innovate Carolina personnel; 2) exploring new ways to communicate our support offerings to faculty through targeted messages to departments, etc.; and 3) offering ImpactX and other Innovate Carolina support services through a competitive and more visible process to increase its prestige among UNC faculty. Finally, we are exploring new ways to measure the success of ImpactX. Because the needs of research teams are highly individualized, it can be difficult to develop uniform metrics that apply to all teams. We continue to iterate on our approach to measuring success so that we can continue to improve the quality of Innovate Carolina's services.

- This project has revealed that building relationships with research teams is an important first step that must be in place before faculty feel comfortable approaching Innovate Carolina staff for support.
- We identified a need to put in place an incentive structure to encourage faculty to engage.
- Our team will continue refining our internal communications structures for updating each other on progress and learning what different research teams are working on.
- In future workshops, we plan to integrate Innovate Carolina staff and service descriptions in ways that help faculty better understand what we do and how we do it.

Future directions

The following questions will guide our future directions and next steps regarding ImpactX:

- How do we widely disseminate information about our services to the next group of researchers?
- How do we make our support services prestigious/competitive to draw researchers and build relationships?
- How do we measure success when every research project that we support is unique and guided by different deliverables/anticipated outcomes?

Personnel and affiliations

Staff, permanent

- Michelle Bolas, Associate Vice Chancellor for Innovation Strategy and Programs, Innovate Carolina
- Sheryl Waddell, Director of the Global Innovate Carolina Network, Innovate Carolina

- Cindy Reifsnider, Director of the Research and Impact Team, Innovate Carolina
- Patrick Kastian, Research Analyst, Innovate Carolina
- Akib Khan, Administrative and Event Support Associate, Innovate Carolina

Staff, temporary

- Erin Hopper, Innovation Special Projects Lead, Innovate Carolina and College of Arts and Sciences
- Michelle Goryn, Project Manager, Innovate Carolina
- Allison Kittinger, Intern, Innovate Carolina

Faculty

- Liz Chen, Assistant Professor, MPH Concentration Lead, Department of Health Behavior, Gillings School of Global Public Health and Design Thinking Lead & Director, Certificate in Innovation for the Public Good, Innovate Carolina

Graduate student

- Emily Skywark, Design Thinking Fellow, Innovate Carolina

Budget

A total budget of \$94,162 was used to fund personnel (listed above), software licenses, proposal development support, and app development for the Collaboratory-funded SaferWays team.