

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

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The Challenge. The NC Policy Collaboratory is 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. A major challenge facing the Collaboratory as it selects teams for funding is answering the foundational question of why scientific breakthroughs often do not reach the end user. The impact goal of this proposed project is 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 Approach. The pathway toward this goal is to leverage the ImpactX platform 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 serves as the hub that is home to the identified problems (in this case, Covid-19) and research expertise, while Innovate Carolina utilizing the ImpactX platform provides the framework and support processes that activate knowledge into applied solutions. The process is defined further below.

A TBD subset of Collaboratory-funded projects will move through the ImpactX process, receiving individualized support and detailed reporting on project metrics, as described on the next page. The ImpactX project team will conduct discovery, analysis, and rapid development support at each step in the process to hit milestones and achieve impact goals.

Project Timeline

June 8, 2020	ImpactX conducts stages 1 and 2 and provides ranking of proposals and recommends a subset of projects for ImpactX support
June 10, 2020	Projects selected by Collaboratory board
September 1, 2020	First funding tranche released. ImpactX works with teams to establish timeline, milestones, projected outcomes; ImpactX connects external experts with project teams for initial feedback
December 30, 2020	All initial funding disseminated and expended
January 1, 2021 through May, 2021	Meet with project teams monthly
June, 2021	Impact reporting

Project Budget. We request \$94,162 (details next page).

Detailed Approach

Stage 1: Rapid Evaluation of Projects for Impact Potential

- Potential projects evaluated through a defined matrix, with key emphasis on having a clear Research/Scientific Lead and a Business Development Lead, to enable evaluation of both the business case and the science/technology opportunity.
- Project must be applied/translational and must address a clearly defined problem. Project and scope must be novel/unique and likely to lead to a significant breakthrough in science, technology, business, or resilience.
- Project team must work across departments and disciplines.
- Project plan includes clearly articulated and achievable milestones.

Stage 2: Convene Team and Establish Timeline, Milestones.

- Assign program manager to each project and establish project communication streams, project tracking tools
- Convene meeting(s) with project team to assess goals, outline process, determine activities.
- Set milestones and establish tracking process.

Stage 3: Assess Internal and External Landscape

- Conduct additional environmental scanning of UNC-Chapel Hill experts in related topics such as coronavirus/SARS/infectious diseases; resilience planning; public health; business planning; simulation/modeling; applied physical sciences; etc.
- Investigate Market/Industry Landscape: where/how will the innovation apply and how does the pandemic affect the market. Examine the landscape for partnering and competition and facilitate conversations across teams to determine where projects can be combined or elements leveraged for greater impact.
- Determine who is impacted by the results of the project and how big the impact would be on that group and on society. (Impacts: well-being; safety/health; personal finance; business; government; social innovation).

Stage 4: Research and Development

- Identify additional team members, partners, advisors based on internal/external landscape.
- PI and core team begin R&D. Add temporary team members and/or consultants as needed.
- Apply design thinking, lean startup, team science methodologies to further define project goals and roles.

Stage 5: Iterative Project Support

- I&E programs provide mentoring and support (e.g., KickStart facilitates recurring scientific advisory panels).
- Gather/analyze regular updates on external landscape and share with teams.
- Industry outreach engages for licensing, manufacturing and funding.

Stage 6: Track outcomes and measure impact

- Continual progress reporting. Assess whether a minimum viable product was achieved or whether a product/service was launched to commercialization or implementation phase.
- Collect data on IP generation, startups, licenses, and research publications. Determine how many industry partnerships were launched by the projects and how many students benefited (education and internships).
- Report on how many I&E programs supported the projects and how many staff/faculty/advisors participated.

Detailed budget (all salary calculations cover July 1 – December 30, 2020)

Budget item	Expense		
	Salary	Fringe	Non-personnel
ImpactX Budget			
Cindy Reifsnider (EHRA) – analysis, technology development, impact metrics (15% salary + fringe)	\$5,773	\$1,908	
Erin Hopper (EHRA) – team convergence, funding leverage, timelines and milestones (25% salary + fringe)	\$28,750	\$8,725	
Patrick Kastian (SHRA) – market analysis & biz dev (10% salary + fringe)	\$3,009	\$1,063	
2 student interns (temp) – technology & biz dev (12 hrs/week, 16 weeks)	\$12,672	N/A	
Additional database licenses (2)			\$1000
Project management support			\$21,262
Design/Team facilitators			\$10,000
SUBTOTALS	\$50,204	\$11,696	\$32,262
TOTAL			\$94,162

Budget breakdown by personnel category

EHRA Salary	\$34,523
SHRA Salary	\$3,009
Grad Student	N/A
Temps	\$12,672
Fringe Pool	\$11,696
Non-Personnel Expenses	\$32,262
Total	\$94,162