

# Call For Research/Education Engagement Proposals for the Charlotte Innovation Barn

## Background:

Worldwide, cities face converging challenges spurred by shifting environmental, social, and economic landscapes. The starting point for solving many of these problems is the recognition that unsustainable consumption and production patterns in socio-technical systems (such as energy, health, the built environment, mobility and agro-food) cascade into the “grand” sustainability challenges faced, such as climate change, inequity, and resource depletion. These problems cannot simply be addressed by incremental improvements, but may require shifts to new kinds of systems, challenging leadership to reimagine soft and hard infrastructure systems if they are to sustainably support long-term wellbeing of residents.

However, the nature, location and timing of “smart” sustainability advancements is poorly understood, the solution of which constitutes a significant research horizon. One compelling reimagining is the “innovative city” that leverages technology, “Big Data” and engagement to efficiently and equitably allocate resources, generate economic development, all while reusing and reducing waste. Needed is actionable knowledge arising from impartial research and engagement that will generate sustainable benefits for all, particularly for the digitally disadvantaged.

## Project Description:

Today, Charlotte is a living laboratory for the challenges associated with the paradigm shift to a sustainable city<sup>1</sup>, and opportunities to develop lasting and formalized collaborations between the UNC Charlotte and the City have emerged at a new facility called “The Innovation Barn”. The City has committed \$3.5 million over four years to retrofit and upgrade a building near Uptown to provide a space for research and community engagement around the circular economy, new urban technologies and workforce development. The managers of the project, [Envision Charlotte](#), have invited requests for space from UNC Charlotte faculty in which to conduct research and scholarly engagement.

The purpose of this Call is to understand faculty demand for classroom and lab infrastructure around sustainability themes within a dynamic urban setting

In advance of a formal “mission”, the Innovation Barn has been conceptualized as an incubator for both ideas and entrepreneurship following the recommendations set forth by the commissioned Report from venture consultants Metabolic, titled *Circular Charlotte: Towards a Zero Waste and Inclusive City* (footnote). Therefore, this Call remains relatively unprescribed, providing ample space for creativity from Faculty around broad urban sustainability themes (below).

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<sup>1</sup> Gladek, Eva, Kennedy, E., Thorin, T. (2018) Circular Charlotte: Towards a Zero Waste and Inclusive City. Retrieved from [www.metabolic.nl/publications/circular-charlotte/](http://www.metabolic.nl/publications/circular-charlotte/)

## The Call:

You are invited to submit ideas for using the Barn space for projects that are in line with the themes of the Barn (below) that take advantage of its location, architecture, and access to the community. Of the 39,000 square feet in the barn, 24,000 is open to UNC Charlotte proposals. This space can possibly be built-out or modified to investigator's requirements. The rest of the facility will house a restaurant, a cafe, and an innovation incubator, among other activities. Complementary to the primary inquiry into how solid waste could be diverted into to new, high-value uses, the building abuts the City's Solid Waste Services Department.

The opportunity provides space that could be used for generating undergraduate and graduate educational experiences, conducting research, community engagement, the development of research ideas, assembling a pilot data set or generating preliminary results, or conducting a small case study that can be used to secure a larger external grant, to name a few.

## Themes:

Proposals for space must relate to one of the four vision statements from the commission report Circular Charlotte: Towards a Zero Waste and Inclusive City, namely

1. Charlotte as a zero waste city
2. Charlotte as a resilient and healthy city
3. Charlotte as an innovative city of the future
4. Charlotte as a city with opportunities for all

Faculty and staff are encouraged to think of innovative solutions that cross colleges and disciplines and that address and redress the unintended impacts of traditional linear development in terms of inequity in housing, health, education, and social capital. Innovative programs are being developed at other universities examining how technology can be used to make urban regions more efficient, greener, and healthier University<sup>2</sup>. Relating the proposed project to UNC Charlotte Civic Action Plan<sup>3</sup> is desirable.

## Submission Dates and Requirements:

Please submit a one page proposal to [barn-group@uncc.edu](mailto:barn-group@uncc.edu) by **January 11, 2019**.

The proposal must include:

- Name and affiliations of all participants in the proposal (all faculty and staff are eligible).
- Description of the project:
- 2-3 paragraphs describing the nature of the project and how it relates to one or more of the four vision statements listed above. Relating the project to the UNC Charlotte Civic Action Plan is desirable
- Expected space needs: Schedule of use (e.g. one day a week, 3 times a week for 2 hours each time), number of people you expect to use the space (students, staff, members of the community).

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<sup>2</sup> [www.oregonlive.com/education/index.ssf/2018/10/portland\\_state\\_invests\\_3\\_milli.html](http://www.oregonlive.com/education/index.ssf/2018/10/portland_state_invests_3_milli.html)

<sup>3</sup> <https://compact.org/resource-posts/university-north-carolina-charlotte-civic-action-plan/>

- Specific requirements for the set up of the space and any needs for specific furniture or equipment

**Evaluation:**

Proposals will be evaluated by a group of representatives from submitting colleges and will be assessed based on:

- Their alignment with the University Civic Action Plan and the Innovation Barn's sustainability themes;
- The feasibility of the project and ability to start during the 2019-2020 Academic year
- The compatibility of the proposed project with others

**Additional Resources:**

- 1) For more information about the Barn, and Circular Economy see
  - a) <https://envisioncharlotte.com/circular-charlotte/>
  - b) <https://charlottenc.gov/SWS/CircularCharlotte/Pages/default.aspx>
- 2) All other questions can be directed to [barn-group@uncc.edu](mailto:barn-group@uncc.edu)