



Systems Genetics Core Facility CC Pilot Program

The **Collaborative Cross (CC)** is a unique UNC resource consisting of a mouse multiparent population derived from eight inbred strains. High level and uniform distribution of genetic variants genome-wide and the presence of combinations of alleles derived from three different subspecies, found only in this population, make this resource uniquely suited to test and characterize the role of genetic diversity in the etiology of biomedical traits. This resource is maintained and distributed by the Systems Genetics Core Facility at UNC. Successful proposals for NIH funding using the CC typically require preliminary data supporting the scientific premise.

The OoR is facilitating a unique call for pilot project proposals that will use surplus CC mice at a deeply discounted price to obtain preliminary data to apply for new external funding and advance the public knowledge available regarding the use of the CC resource. These mice can be used to address a broad range of biological questions including but not limited to the following examples:

- Does genetic variation affect biomedically relevant phenotypes?
- Does genetic variation and sex affect biomedically relevant phenotypes?
- Does genetic variation and environment/exposure affect biomedical relevant phenotypes?
- Development of new models of human disease

Successful pilot projects will have access to 96 CC mice at \$10.00 per mouse. Non-federal funds must be used for the purchase. The CC strains allocated to each pilot project will be based on availability and researchers cannot select specific strains. There will be two possible formats:

- 6 replicates (either 3 males and 3 females or 6 males) from 16 strains or
- 8 replicates from 12 strains.

Please specify the preferred format in your proposal. These mice will be 10-14 weeks of age. Projects will get all their mice in a single batch except if otherwise specified. If another format is specified it can be evaluated, but will be given a lower priority.

Application Materials:

If you are interested in submitting a proposal to access these mice please provide the following information in your proposal:

- Title of the project
- PI and col(s) of the project
- Short description of Specific Aims with the proposed use of the mice

- Please provide a short description on how data gathered from pilot project will be used to satisfy the following programmatic goals:

1. apply for new external funding
2. support potential publications
3. publicly disseminate data generated by the pilot (ie deposition in public databases, bioRxiv)

- Timeline for experiments and outcomes
- IACUC protocol #
- Current other support for PI and col

Requirements:

- The PI should have an active IACUC protocol (and mouse space) at the time of the proposal.
- Mice provided through the Pilot projects are not to be used to establish CC colonies. CC mice can be bred to model strains or to make mice of certain ages for data collection, but the mice from the CC pilots should be for **terminal use**.
- These pilot studies **cannot be used to replace or supplement existing funded grants**.
- If the investigator has current funding to use the CC resource, **the proposal must explicitly state how the pilot project is different from the currently funded project**.
- Projects should be able to take the mice soon after notification of award, but timing of the actual delivery of the mice will be specified by the Systems Genetics Core Facility. If the time of delivery of the mice needs to be adjusted, the project may be moved to the bottom of the list.

An external review committee will review the proposals on a quarterly basis. Submissions will be accepted quarterly on the following deadlines:

February 1

May 1

August 1

November 1

Please contact **Jennifer Brennan** in the Office of Research with any questions. Proposals can be emailed directly to Jennifer at jenbren@med.unc.edu.