



Appendix II

Budget Allocation

Personnel Costs: \$ 49,117
Fringe: \$ 9,331

Non-personnel Costs: \$1,547,481

Total: \$1,605,929

**Per UNC CH Policy, personnel fringe will be paid by the Collaboratory from this award prior to funding transfer.*

Budget Summary

EHRA Salary	\$ 48,312
SHRA Salary	\$ 805
Grad Student	\$ 0
Temps	\$ 0
Fringe Pool	\$ 9,331
Non-Personnel Expenses	\$1,547,481
Total	\$1,605,929

Appendix III

BARIC High-throughput equipment

Ralph's group has tested remdesivir and developed NHC, is the product of a long-term mission to develop broad-based vaccines and therapeutics using techniques that block cellular mechanisms of viral activity, rather than tailoring to specific viruses. This is the ultimate strategy for creating rapid off-the-shelf drugs that can be deployed against any emerging pandemic rather than being at the mercy of years of development and testing. He and his team have established a platform to rapidly test and evaluate biotech products for rapid release using in vitro and in vivo studies. Ralph's time is in extreme demand. He has received hundreds of requests from NC biotech alone to test their drugs. His lab does not have capacity to do this so he has turned them all away. If we had this capacity, he could do so much more for campus and for the state. In addition, Ralph has been asked by NIH to run all the vaccine neutralization assays for vaccine testing in the US – having these priority items will allow Ralph to do this, which will be HUGE visibility for UNC but is only possible w this equipment.

Impact to the State (300 word limit)

- Description of the problem or challenge being addressed and how the problem impacts those in the state of North Carolina
- Describe how the proposed research will provide impactful solutions to the described problem to help the state of North Carolina

As the current COVID-19 pandemic so clearly shows, we need to start preparing for the next pandemic now. Developing a comprehensive plan to prepare in advance for viral pandemics will require significant breakthroughs in public health, virology research, and new drug discovery. Ralph Baric is a world leader in each of these areas.

Ralph's group has tested remdesivir and developed NHC, is the product of a long-term mission to develop broad-based vaccines and therapeutics using techniques that block cellular mechanisms of viral activity, rather than tailoring to specific viruses. This is the ultimate strategy for creating rapid off-the-shelf drugs that can be deployed against any emerging pandemic rather than being at the mercy of years of development and testing. He and his team have established a platform to rapidly test and evaluate biotech products for rapid release using in vitro and in vivo studies. Ralph's time is in extreme demand. He has received hundreds of requests from NC biotech alone to test their drugs. His lab does not have capacity to do this so he has turned them all away. If we had this capacity, he could do so much more for campus and for the state. In addition, Ralph has been asked by NIH to run all the vaccine neutralization assays for vaccine testing in the US

The impact of this work is to allow Ralph to do more of his exceptional work and to allow rapid assessment of NC biotech compounds, speeding solutions to this pandemic. The equipment will bring HUGE visibility for UNC and the state and will help restart the NC economy.

Budget Justification (200 word limit): Funds are limited. We encourage all teams to revisit their budget and determine if it can be reduced.

- Please also complete the provided budget template

11 months of salary support for 3 Postdoctoral Research Associates.

0.24 months of salary support for an accounting technician.

Fringe Benefits

Benefits are for faculty, staff and postdoctoral research associates are calculated as follows:

Faculty and Staff – 25.889% Social Security and retirement and \$6,512.00 for health insurance,

Postdoctoral Research Associate benefits 9.49% of salary and \$4,809 for health insurance.

Equipment

Equipment to establish a high-throughput laboratory for rapid testing of new drug compounds as part of the Baric Laboratory pipeline for cell and animal models to identify potential drug candidates to move through to the assessment of virus-host interactions in protective immunity, host susceptibility, and virus pathogenesis

Supplies

Supplies critical to the completion of this project include CO2 tank switcher for incubator stack; Microcentrifuge, Cell counter, and liquid handler disposables.