



NATHAN SHOCK CENTERS
OF EXCELLENCE IN THE
BASIC BIOLOGY OF AGING

PILOT AWARDEE SPOTLIGHT



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2022 UAB NSC Pilot Award

The Cystic Fibrosis Airways – establishing a novel in vitro and in vivo model to study the biology of aging in the lung

How did you become interested in aging?

I have been working with patients with chronic lung diseases and have seen them aging and facing new challenges. In addition, I also have been working on aging pathways on a molecular level. This is an emerging field and those patients will need novel anti-aging therapies to improve their quality of life.

Briefly describe your project in non-scientific terms. What questions are you trying to answer?

We are very interested in characterizing the “aging cystic fibrosis lung” and hope we can find new pathways, which can be targeted to develop novel therapies.

What previous research or experience informed the development of this proposal?

I have worked in the cystic fibrosis field over the last years and we have shown that lung inflammation can be modulated by aging pathways.

What’s exciting about your project’s potential impact?

As mentioned before; in the current times, cystic fibrosis patients live much longer and will have to deal with comorbidities associated with aging. Our ultimate goal is to help them age “healthy”

If your project is successful, what is the next step?

We would plan for a bigger proposal together with other centers to study aging in the CF lung in more depth adding translational research.

How has support from and collaboration with the Nathan Shock Centers helped further this project and/or your research overall?

Our Nathan Shock Center has not only helped me with advising on writing this proposal but I will also use several core facilities and collaborate with them.