

# Geroscience Technology Core

GTC



**USC-Buck**  
NATHAN SHOCK CENTER

# GTC

- Provide advice on the design of geroscience studies across model organisms
- Facilitate access to several technology development pipelines
- Coordinate the geroscience technologies at USC and the Buck to accelerate research studies
- Promote use of resources at both USC and the Buck to enhance study design

# List of Technology Platforms

- MITOCHONDRIA AND METABOLISM TECHNOLOGY PLATFORM (**MMTP**)
- MODEL ORGANISMS HEALTHSPAN AND RESILIENCE TECHNOLOGY PLATFORM (**MOHRTP**)
- NEXT-GENERATION TECHNOLOGY PLATFORMS (**NGTPS**)
  - Highlight a recent funded example



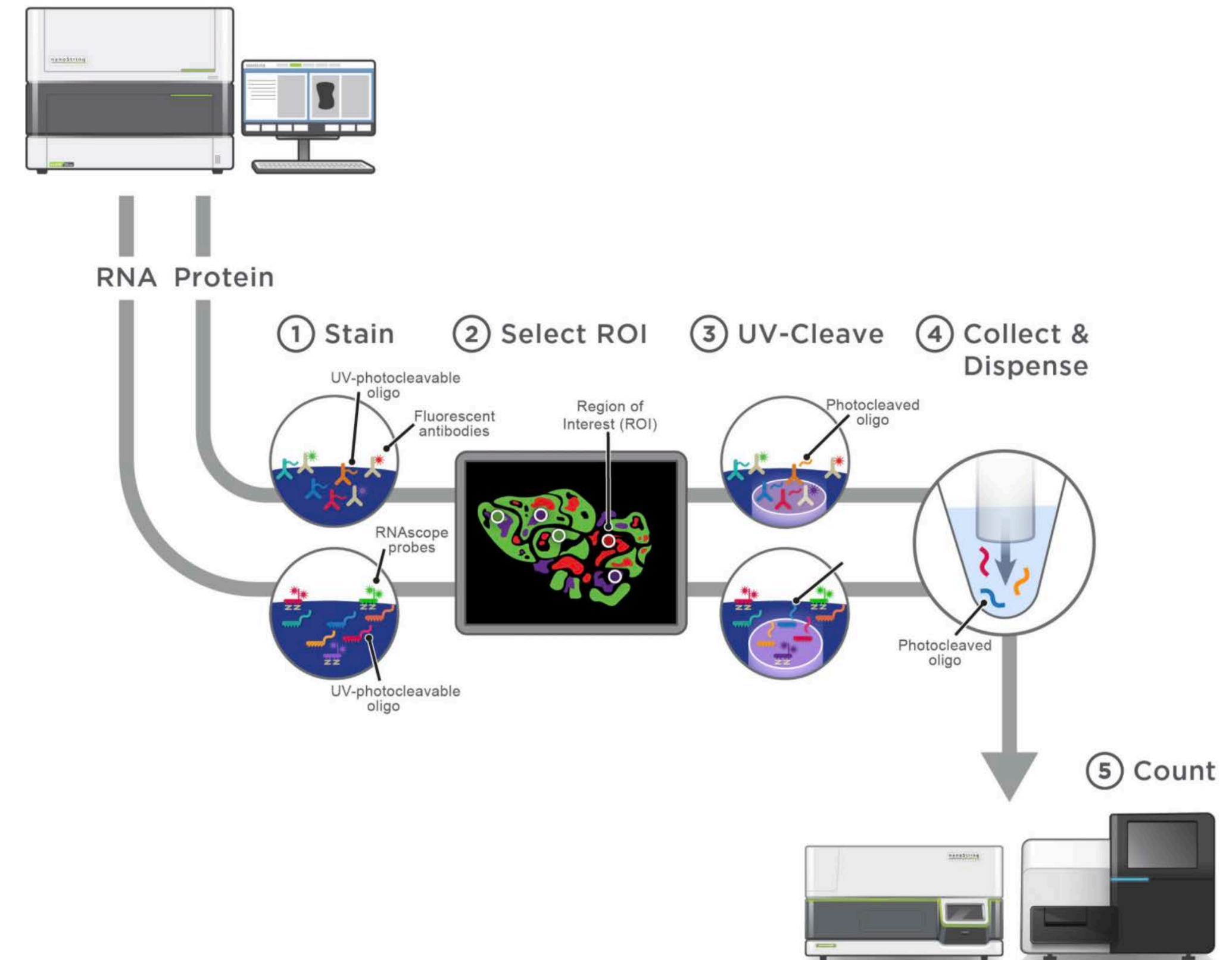
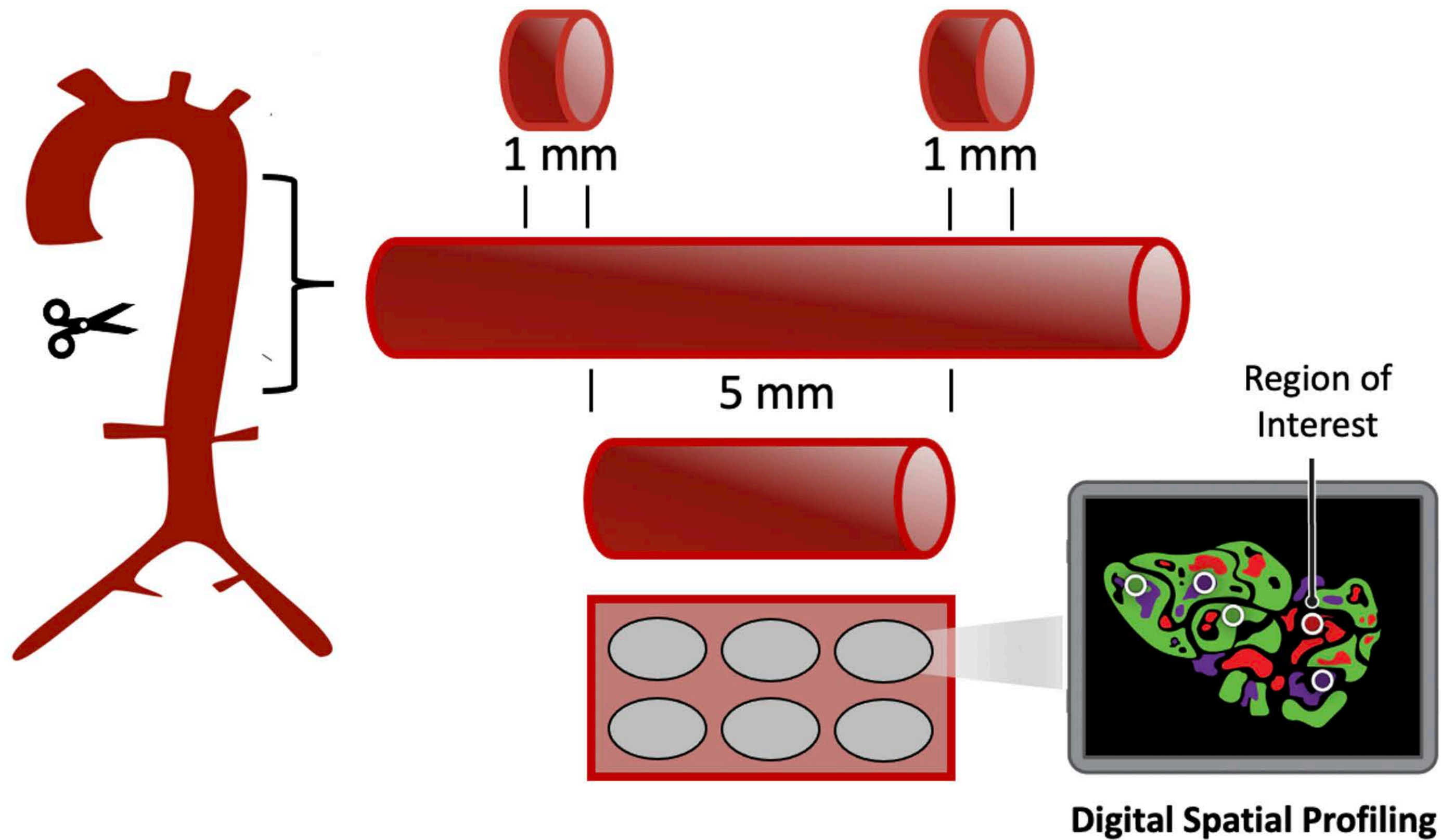
# Pilot program to generate data for grants/papers

- Aging vasculature an important problem (no treatments)
- Spatial profile of aging blood vessels poorly characterized
- Doug Seals/Zach Clayton (UC Boulder) proposed a pilot to better understand vascular dysfunction
- Uses state of the art transcriptional profiling of aging aortas



# Spatial transcriptomic/proteomic profiling

GEOMX Spatial profiler (Nanostring)



Doug Seals, Zach Clayton (UC Boulder, CO)

Analyzed data expected June 2021