

MaineHealth

## MaineHealth Knowledge Connection

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Costas T. Lambrew Research Retreat 2021

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2021

### The MMC BioBank is a Resource that Supports Biomedical Research

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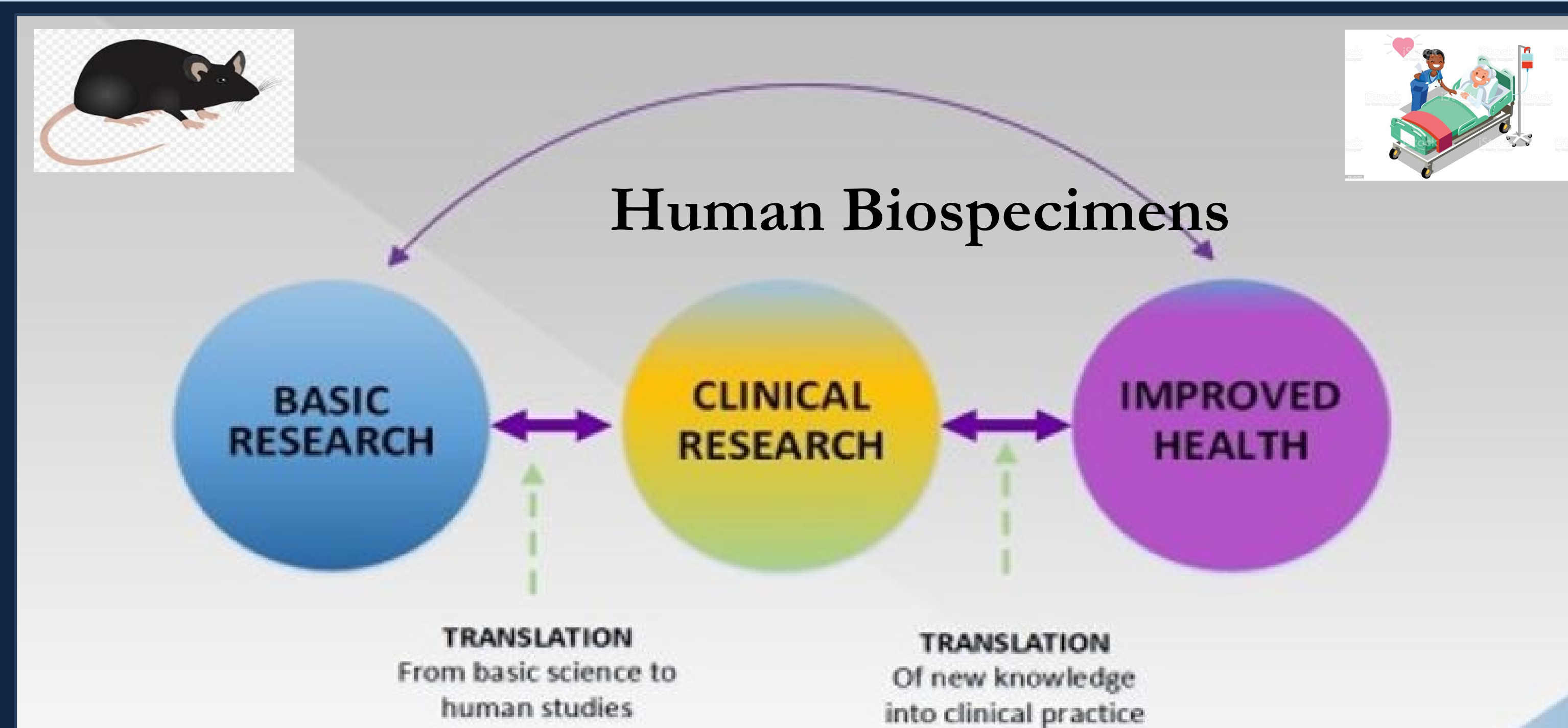
## Authors

Anne C. Breggia, Sue LaPierre, Christopher Keister, Dawn Charnetzky, Hannah Brown, Joseph Nano, Sydney Robinson, Howard Feller, Susan Nester, Elizabeth Hamir, Heidi Ingersoll, Anthony Sellner, Trevor Jorgensen, and Mike Jones

# The MMC BioBank is a Resource that Supports Biomedical Research

Anne C. Breggia, Sue LaPierre, Christopher Keister, Dawn Charnetzky, Hannah Brown, Joseph Nano, Sydney Robinson, Howard Feller, Susan Nester, Elizabeth Hamir, Heidi Ingersoll, Anthony Sellner, Trevor Jorgensen, Mike Jones

**Mission:** To provide normal and diseased annotated human biospecimens to the research community that supports discoveries leading to improved patient therapies and advances in personalized medicine

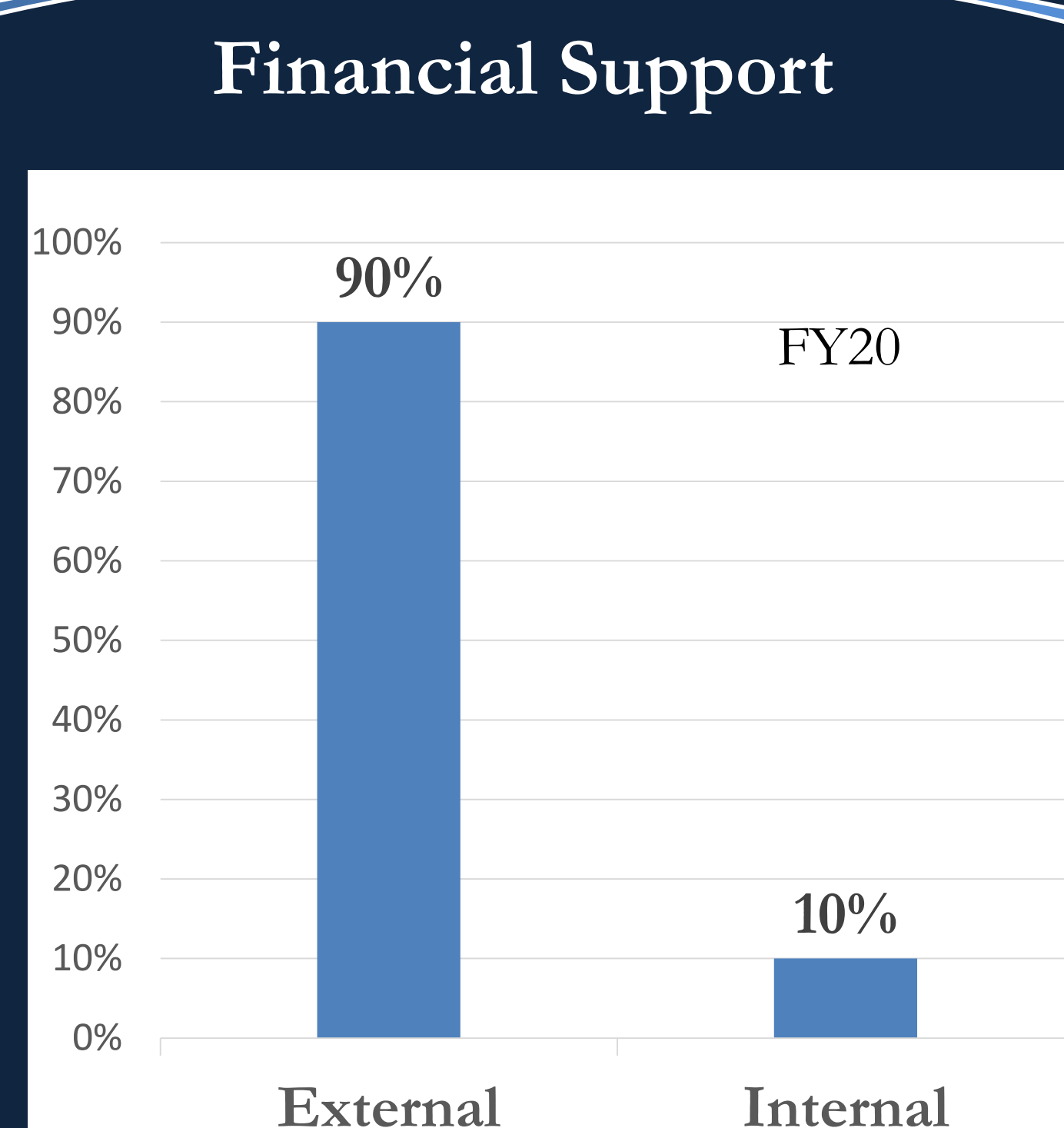


Established in 2002  
 IRB Protocol #2526  
 CAP Accredited since 2014  
 ISBER member since 2013  
 NCI Best Practices

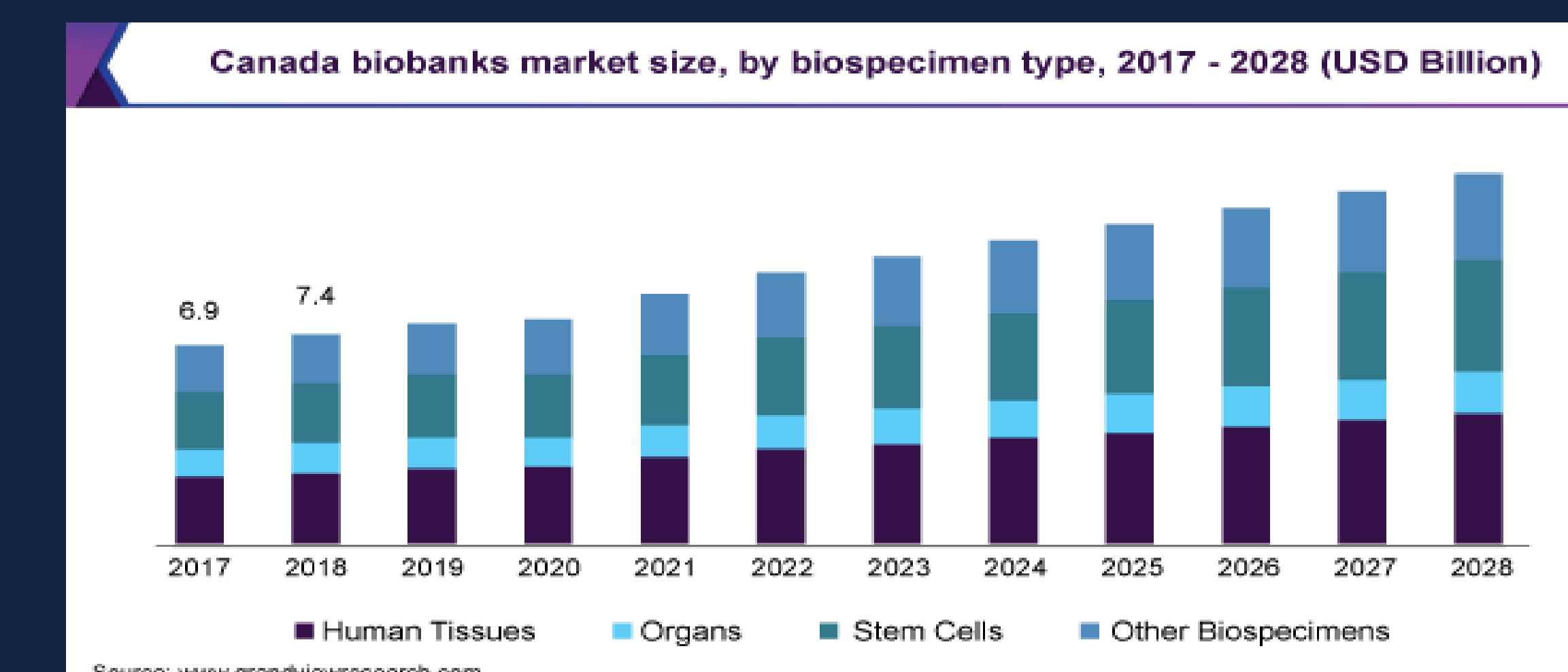
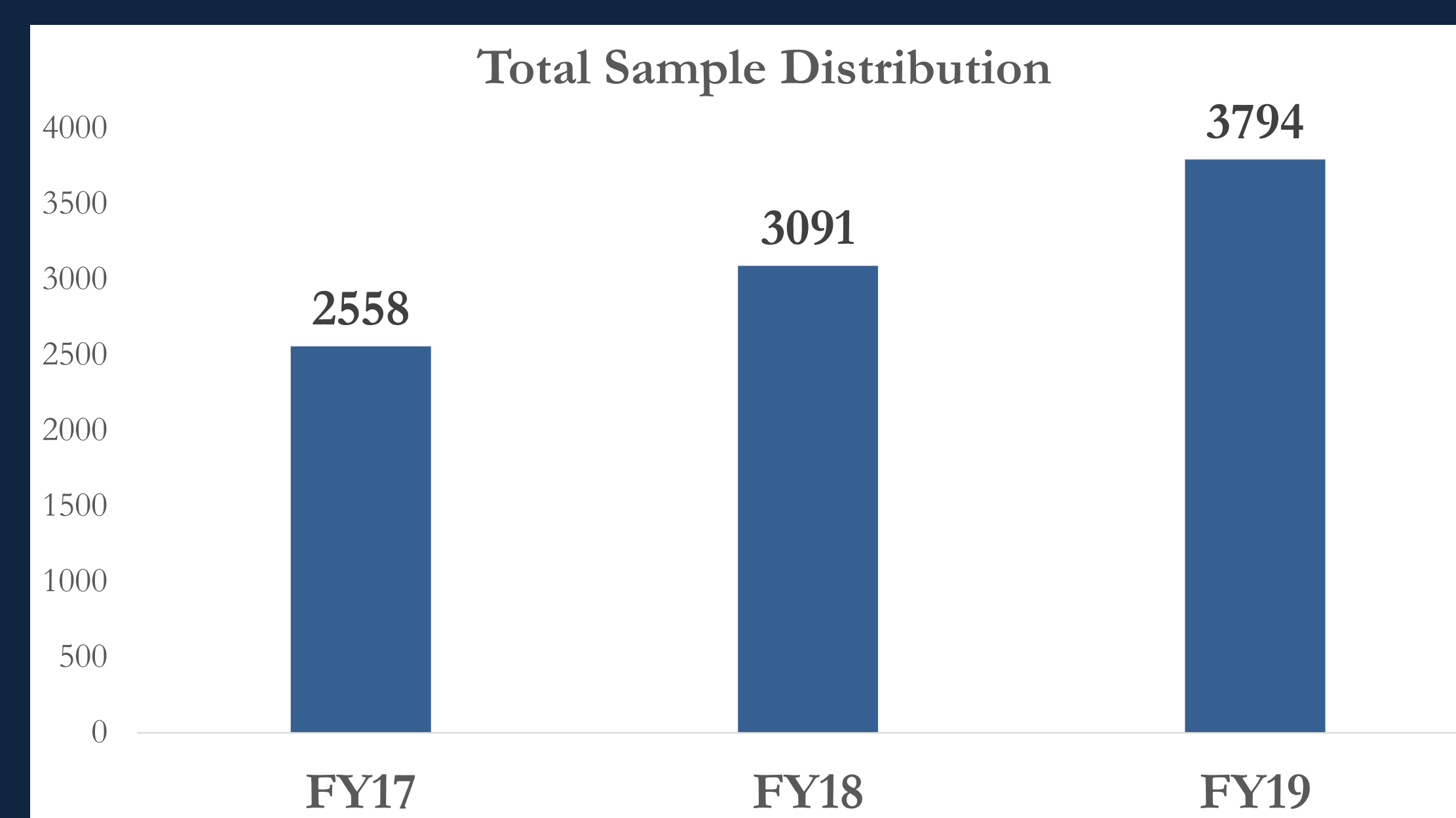
Inventory (Progeny): 100,000  
 Distribution: 3,500/year  
 Tissue: Fresh, FFPE, Frozen & Blood, and Bone Marrow  
 NIH/NCORP Cancer Moonshot Biobank

## Patient Informed Consent → Biospecimen Collection → Processing → Pathology Review → Storage/Distribution

External Distribution (Commercial):  
 Biotechnology  
 Pharmaceuticals  
 Biorepositories

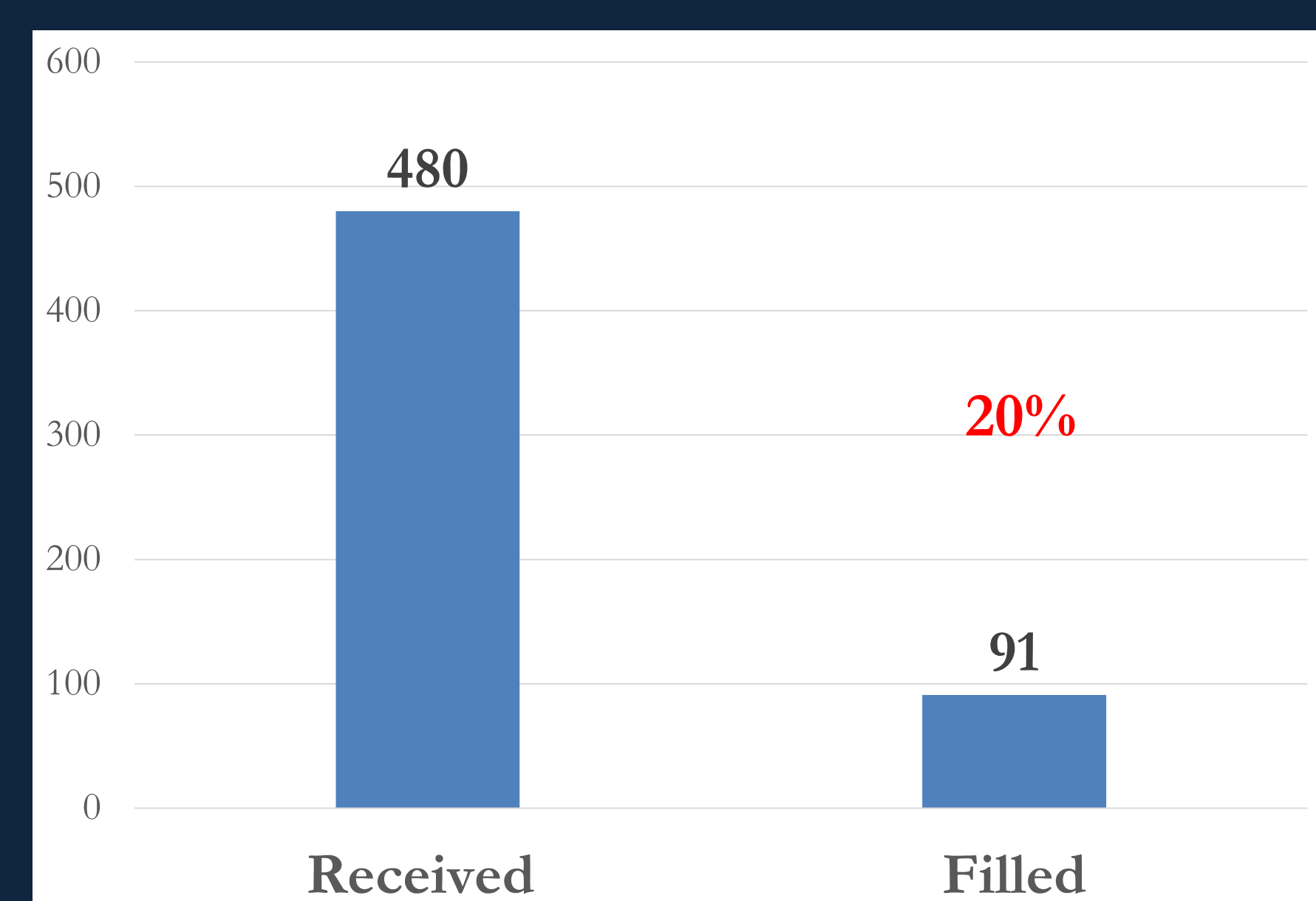


Internal Distribution (Non Commercial):  
 MMC/MMCRI  
 Physicians and Scientists  
 Academic Institutes



One of the key factors driving the growth is the growing collaborations between biobanks and end-users.

### FY21 External Biospecimen Requests



2009 NIH OBBR → 2011 iSpecimen

“81% of researchers limit the scope of their work due to difficulties obtaining quality biospecimens.”

### MMC BioBank & NorDx Collaborations

**R&D:** Novel Assay for SARS-CoV-2 detection utilizing CRISP-Cas-9 technology;  
 Collaboration with Sherlock Biosciences (Broad Institute, Cambridge, MA)

#### Investigator Initiated Research Studies:

Bob Carlson, MD and Anne Breggia, PhD (co-investigators)

STUDY TITLE: A Period Seroprevalence (SARS-CoV-2) Survey in MHCCN Cancer Healthcare Workers; Scot. Remick, M.D., Principal Investigator

STUDY TITLE: Cardio Surveillance of MHCCN Cancer Patients Undergoing Immune Checkpoint Blockade; Sunjeev. Francis, M.D., Principal Investigator

STUDY TITLE: Non-Invasive Antibody Test for COVID-19, NIT-COVID; Douglas Sawyer, M.D. Ph.D., Principal Investigator

### NorDx: Remnant Sample Program

Blood, urine and body fluid samples collected by NorDx are transferred to the BioBank after all diagnostic testing has been completed and the required 7 day CAP embargo has been met

Samples are annotated with clinical data from the EMR (EPIC)

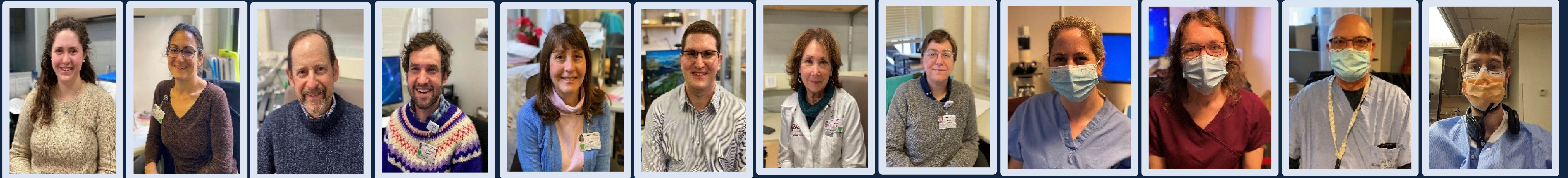
Samples and data are deidentified prior to distribution

Link between PHI and the BioBank code number is destroyed in the BioBank Progeny database following sample and data distribution (additional data cannot be collected).

#### Distribution July 2019--April 2021:

395 serum samples  
 4,300 mid turbinate swabs

# Acknowledgements



## BioBank Staff

Sue LaPierre  
Christopher Keister  
Dawn Charnetzky  
Hannah Brown  
Sydney Robinson  
Joseph Nano  
Howard Feller  
Susan Nester

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Anthony Sellner  
Heidi Ingersoll  
Trevor Jorgensen

THANK-YOU!!

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