Benefits of Cryopreservation

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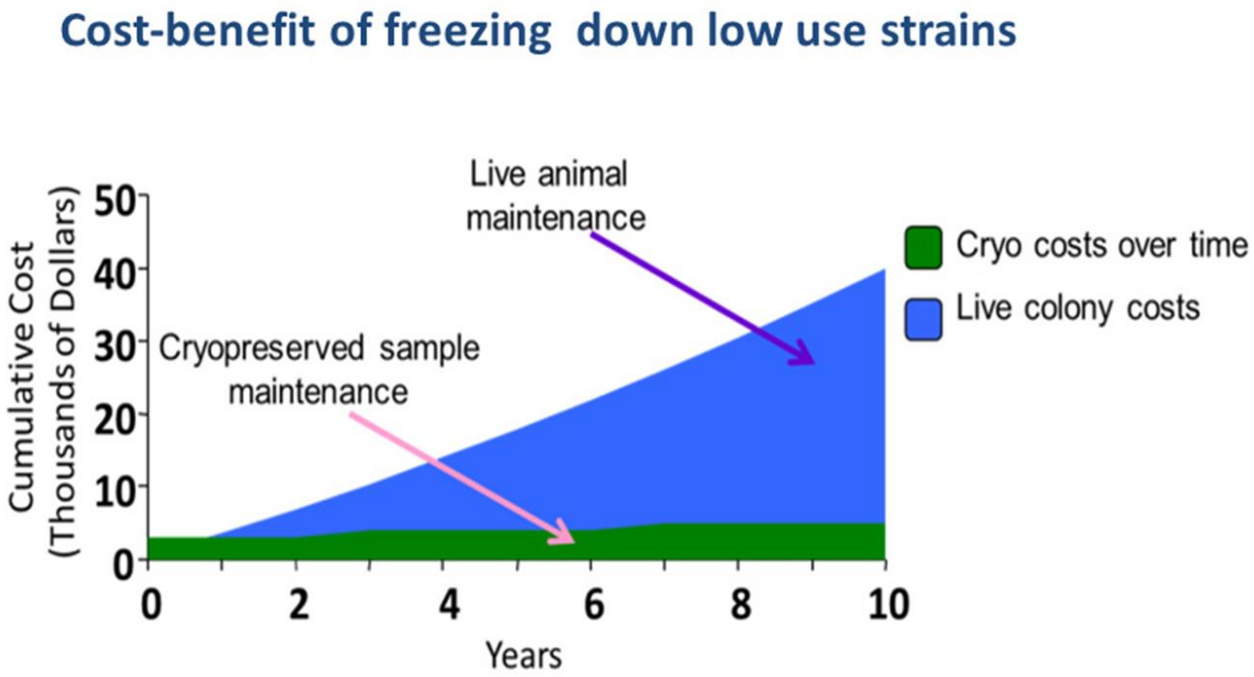
Cryopreservation: Life FAR below zero

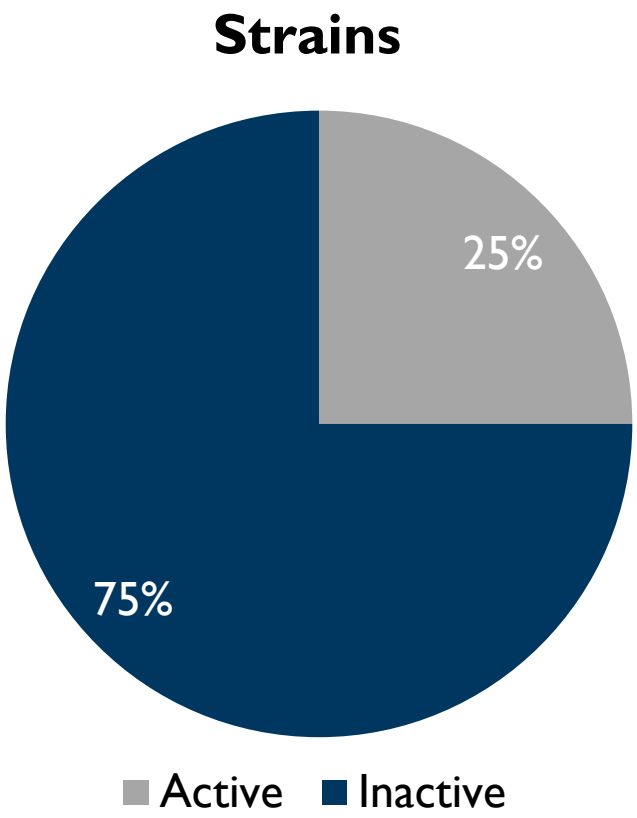
- Embryos, sperm, ovaries can be successfully cryopreserved
- -196° C: Cells remain viable
- Used successfully for 30+ years
- "Freezes" colonies in time

Benefits of Cryopreservation: Reduction in Cost

- Per diem
- Genotyping
- Colony management
- Overhead
- Space

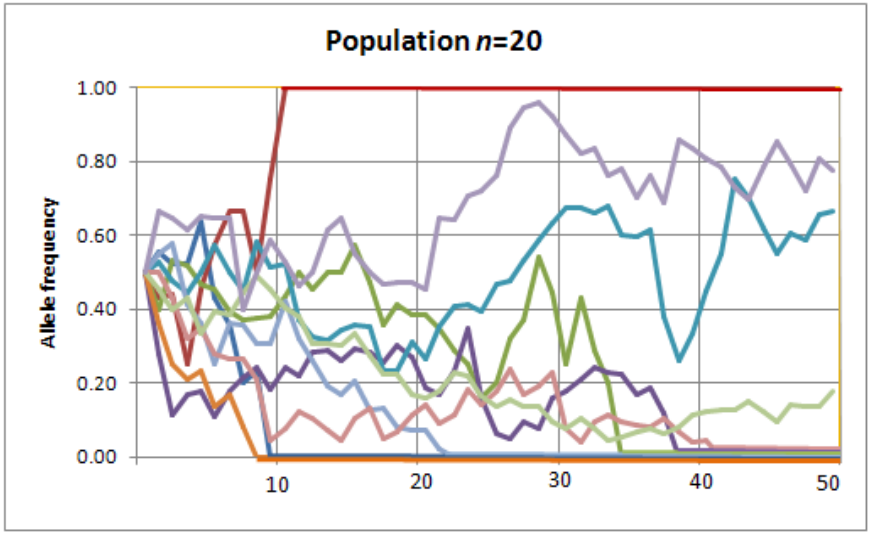


Impact of “archival strains”



- 75% of strains at most institutions are not actively used
- $6,000-$8,000 to maintain a colony for a year.

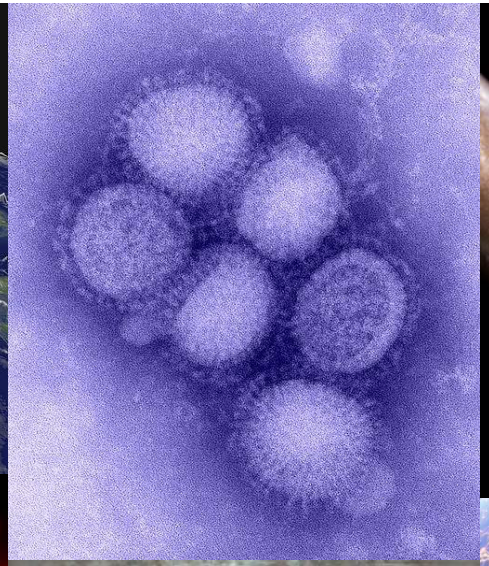
Benefits of Cryopreservation: Safeguards against genetic drift/Breeding Contamination

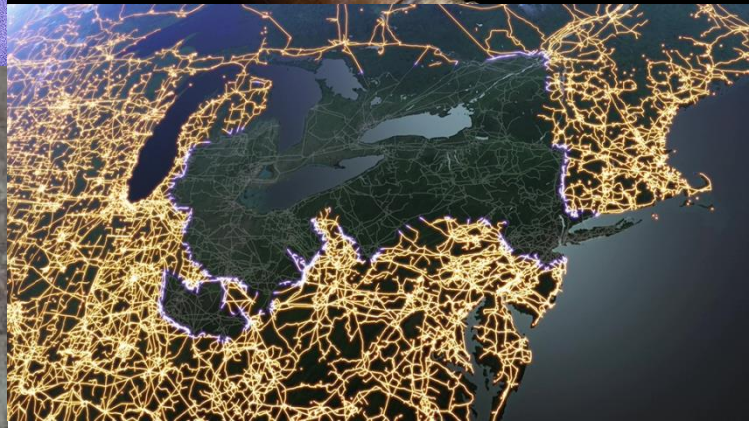


Cryopreservation: Making distribution easier

- Maintains availability
- Easier to ship
- Reduces
  - Maintenance costs
  - importation time
  - relocation costs

Benefits of Cryopreservation: Reduction in Recovery Risk





Cost of Disasters

- $100,000 — the cost to develop a single genetically engineered mouse strain
- 6 to 18 months — the time to develop a genetically engineered mouse strain
- $6,000 — the minimum yearly cost to maintain a genetically engineered strain
- Immeasurable — the scientific discoveries that hinge upon the availability of these mice

How do I participate?

- Visit the Mouse Genetics and Gene Targeting CoRE Facility website for more information:
  - https://icahn.mssm.edu/research/portal/resources/deans-cores/mouse-genetics-and-gene-targeting

- Speak to your CCMS Facility Veterinarian or Facility Supervisor for guidance