



RAPID RESPONSE BY LABORATORY ANIMAL RESEARCH INSTITUTIONS DURING THE COVID-19 PANDEMIC: LESSONS LEARNED

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A Virtual Workshop

The National
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SCIENCES
ENGINEERING
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ILAR Round Table Lessons Learned: NHP Supply

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State of Global NHP Supply just prior to pandemic

CYNOMOLGUS MACAQUES

Tightness driven by key factors:

- Increased use in China for China
- Increased focus on biologics vs small molecule
- Strength of global economy including research sector

RHESUS MACAQUES

Limited availability based on key factors:

- US produced numbers of Indian origin Rhesus available commercially are limited
- Chinese Rhesus limited availability but not always an acceptable substitute

OTHER NHP MODELS

Smaller more niche models often not readily available

- Purpose bred African Greens, Marmosets

Availability of NHPs already tight going into pandemic

Challenges during the pandemic

- Chinese export restrictions on Non-Human Primates starting in February 2020
 - Majority (60%) of NHPs used in research were imported from China
- Air transport challenges
 - Less regular passenger flights
 - High utilization of cargo for emergency supplies
 - Cost increases with cargo and use of charters
- Prioritization of supply
 - High global demand for remaining available supply
- Which Origin of NHP?
 - Is it even the right model?
- Consideration to expand sources / countries
 - Health risk / industry risk
- Numerous cost increases from suppliers during the year

Lessons learned (getting in front of the next one)

- Continued diversification of sources
 - Expand sources prior to the next pandemic
 - US research community increasing interest in domestic breeding
- Transportation
 - Expand carriers
- Coordination between science and NHP suppliers on correct strain
 - Earlier identification of exact NHP can help secure dwindling inventory
- Set expectations up front for cost variability