

Coffee and conversation at IIDF 2/16/2017

### THE UNIVERSITY OF LOUISIANA AT LAFAYETTE

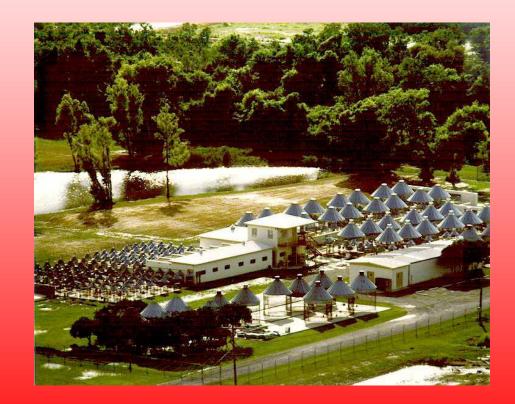


**Preclinical Research in an Academic Setting** 



<u>Mission</u>: Specialize in providing resources for the development and characterization of non-human primate models for applied and basic research aimed at promoting human quality life.







# Facility History

- Naval Base (1950s-1960s)
- GSRI (closed in (1984)
- ≻ USL → ULL





- Center of UL Lafayette
  - Represent 40% of total university research expenditures (all sources) >20 million annually
  - Represent 87% of total university research expenditures (business/industry)
  - Transitioning into a comprehensive research institute
  - Operate as a small business under umbrella of university



- NIRC Assets
  - Facilities
    - 100 acre facility
    - 470,000 sq feet of animal housing and support
    - Indoor / outdoor housing
    - On site diagnostic clinical pathology laboratory
    - On site imaging capabilities...
  - > Personnel
    - 180 employees
      - Licensed personnel- DVM, CLS
      - 20% college degrees- DVM, Ph.D, BS in biology, toxicology, Sustainable Resources, etc.



## **Rhesus Macaque**

### >5100

Cynomolgus Macaque 450

## **Pigtail Macaque**



## Macaca mulatta



400

# Chimpanzee

(RHM)

5119 Brown Tufted Capuchin

20



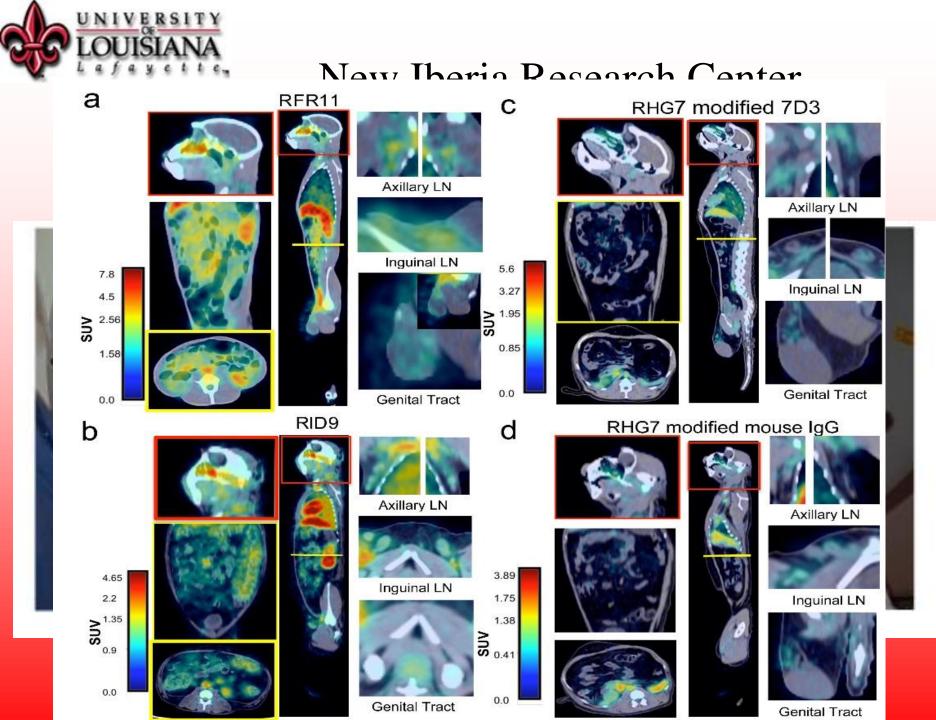
- Clinical Relevance
  - Disease models
    - Diabetes
    - Hypertension
    - Dysmetabolic/Dyslipidemia
    - Stroke
    - IBD (Inflammatory Bowel Disease) and Crohn's
    - SIV, SHIV (HIV)
    - Antivirals (HCV, HBV, HIV)
    - Zyka
    - Antiviral drugs for Hepatitis B, C, HIV
    - Monoclonal antibody therapies...



- Overview of Therapeutics/ Drug Approval Process
  - > 15 year
  - FDA preclinical approval process requires characterization and safety data in a minimum of 2 animal models (2 animal rule)
    - Relevant model
      - Route, dose, safety testing predictive of clinical use in humans
      - Lowest possible species

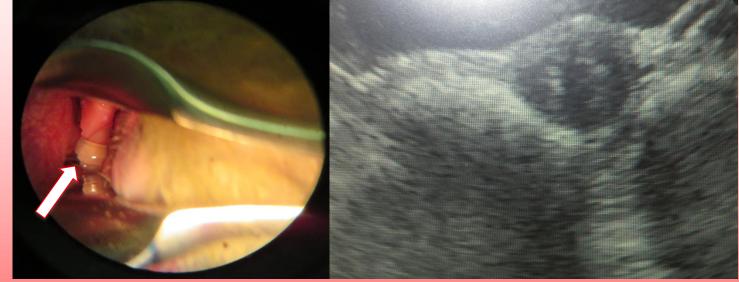


- Vaccines tested at NIRC are currently available in man
  - Hepatitis B
  - >HSV (chicken pox, shingles)
  - HPV (human papilloma virus cervical cancer, penile, rectal cancers)
  - >Meningitis
  - ▷Pneumococcus
  - ≻Influenza





New ring



### Removed ring.1



### Ways to detect the ring in vivo

- Checked visually using a speculum
- <u>Anal palpation</u>
- <u>Ultrasound detection</u>

Removed ring.2





#### Report to Office of Extramural Research Acting Director on Office of Laboratory Animal Welfare (OLAW) Site Visits to Chimpanzee Facilities – July 2010

Animal res (USDA) to conduct inspections of registered research facilities housing chimpanzees and assess current housing, husbandry, and handling practices. In order to investigate the allegations made against NIRC and to conduct a cross sectional evaluation of all Assured institutions housing chimpanzees, OLAW began a year long series of site visits, many of them conducted in conjunction with the USDA inspections.

and ensur The following institutions were visited:

University of Louisiana - Lafayette, NIRC (Louisiana)

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FINDINGS

Overall, the institutions housing chimpanzees were found to be in compliance with PHS

Policy. Social Housing and Enrichment of Chimpanzees The chimpanzees were, with rare exception,

Yet we socially housed. They had complex and stimulating environments, were provided with environmental

enrichment in the form of manipulanda and food treats, and had positive interactions with the staff.

In cases where an animal was singly housed due to study requirements or incompatibility with other

animals, efforts were made to provide enrichment and return the animal to a partner as soon as feasible.

Husbandry and Veterinary Care of Chimpanzees

Without exception, the quality of care being provided was uniformly high and supported by dedicated and

knowledgeable animal care teams with integrated animal behavior and enrichment professionals. The

veterinary care included state of the art resources rivaling major human medical centers



## esearch Center

