

# LOUISIANA ANIMAL DISEASE DIAGNOSTIC LABORATORY (LADDL)

Dan Paulsen, Director



AAVLD  
Accredited

# Facilities

- ◉ Modular Building square footage:

Lab Room 124 = 2365.81 sq. ft

Lab Room 126 = 897.73 sq. ft

8 Offices = 897.73 sq.ft

Business Office = 539.10 sq.ft

## SVM

Receiving and Accessing 281 sq.ft

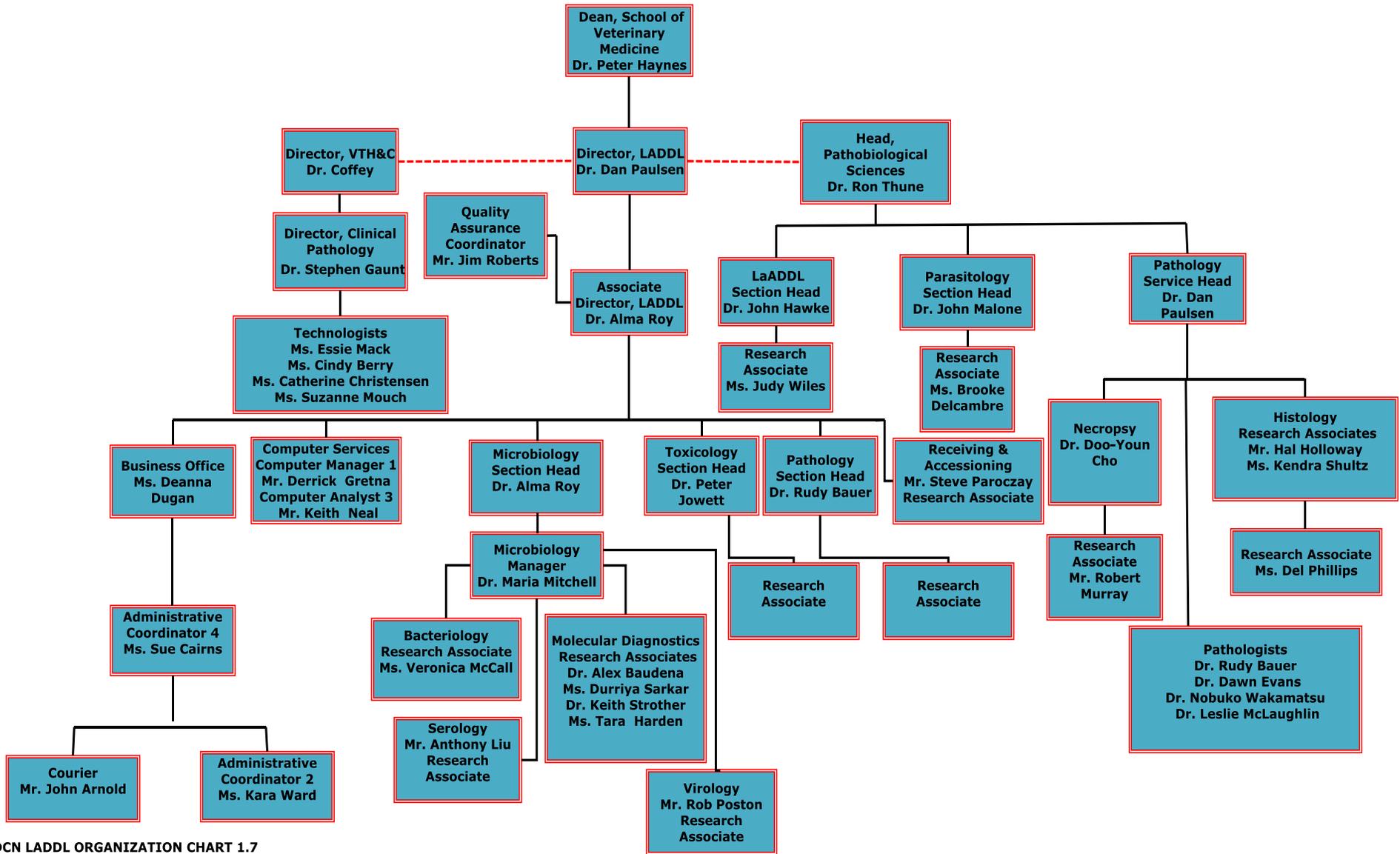
Room 3408 = 250 sq ft

Room 3410 = 250 sq. ft

- ◉ Necropsy = 2436 sq. ft

- ◉ Clinical Pathology ~ 1750 sq. ft

# LOUISIANA ANIMAL DISEASE DIAGNOSTIC LABORATORY ORGANIZATION CHART\*



# Case Load, 2010

- 24,809 total accessions
- Avian – 3,091
- Bovine – 1,423
- Canine – 7,964
- Caprine – 57
- Equine – 9,065
- Feline – 1,468
- Fish – 61
- Ovine – 14
- Porcine – 38
- Zoo/Wild/Exotic Mammal – 169
- Non Mammalian – 514 (+821 mosquito)
- Not Specified - 258

# Toxicology



# Toxicology

- ◎ 2010 Case Load: 3617
- ◎ Tests
  - Metals
  - Insecticides
  - Rodenticides
  - Selected others
    - Drugs
    - Toxins

# Toxicology

## ⦿ Equipment

- Atomic Absorption
- GC-Mass Spectrophotometry
- HPLC
- Mercury Analyzer System
- UV-Vis Spectrophotometry

## ⦿ SVM shared

- LC-Mass Spec
- 2-Dimensional Chromatography

# Molecular Diagnostics

- 2010 Case Load: 2981

- Tests

- PCR viruses: AI, EHV, FHV, SIV, H1N1, whitespot
- RT-PCR viruses: EI, CD, EEE, WNV
- PCR bact: Bartonella, Rhodococcus
- RT-PCR bact: Chlamydophila, Anaplasma, Mycoplasma, Tritrich, Strep equi, Ehrlichia, Lepto

# Molecular

## ⦿ Equipment

- Several thermal cyclers
- Magnetic particle processor
- Gel electrophoresis equipment
- Clone Zones

## ⦿ Shared, BIOMED (SVM)

- Genetic Analyzer, 4 capillary CE (sequencing)
- High throughput thermal cyclers
- Nano Drop Spectrophotometry
- Alpha Innotech Multimage

# Bacteriology

- ◎ 2010 Case Load: 6798
- ◎ Tests
  - Culture
    - Aerobic/anaerobic
    - Special (Salmonella, Campylobacter, Mycoplasma, Vibrio cholerae)
  - Sensitivity
  - Fungal
    - Dermatophyte

# Virology

- ◎ 2010 Case Load: 960
- ◎ Tests:
  - Viral Culture (cell and chicken embryo)
  - Viral antigen ELISA
  - FA/IFA: numerous viruses
  - Rabies FA

# Pathology

- ◎ Case load (Necropsy: 887 Biopsy: 4511)
- ◎ Personnel
  - 7 Pathologists (academic/diagnostic)
  - 3 Histotechnologists
  - 1 Trimming Technician
  - 1 Immunohistochemical Technician
- ◎ Equipment
  - Single to 14-head scopes with cameras
  - Fully equipped histology laboratory
  - Dako automated immunostainer
  - TEM and SEM microscopes
  - Confocal and laser dissection microscopes
  - Digital slide scanner

# Others

- Serology
- Clinical Pathology
- Parasitology

# LA Agricultural Chemistry Lab

- ◎ FERN Laboratory
- ◎ Methods
  - PAH screening
  - ELISA for prohibited rumen material (BSE)
  - PCR for Vibrio in seafood
  - Melamine testing
  - Pharmaceuticals in feeds
- ◎ Equipment: LC-MS, GC Mass Spec, LC Fluorescence, GC/FIC/ECD/NCD, ICP Mass Spec

# Networking Capabilities

- ⦿ Member of NAHLN
- ⦿ Currently using VetLims
- ⦿ Have purchased USALims
  - Go live date in May 9, 2011
- ⦿ 1 full-time and 1 shared IT personnel
  - Access to SVM and LSU IT support

# Location

On Mississippi River

500 million tons of cargo/year

60 Miles from Port of New Orleans

Second busiest port in USA

2000 vessel calls/yr

Port of Baton Rouge

One of top ten ports in USA

53 million tons/year in its jurisdiction