

**NATIONAL INSTITUTES OF HEALTH  
DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**NATIONAL PRIMATE RESEARCH CENTERS (NPRC) PROGRAM  
DIVISION OF COMPARATIVE MEDICINE  
NATIONAL CENTER FOR RESEARCH RESOURCES**

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**2P51RR000164-45  
TULANE NATIONAL PRIMATE RESEARCH CENTER**

Final

**TULANE NATIONAL PRIMATE RESEARCH CENTER**

**TULANE UNIVERSITY HEALTH SCIENCES CENTER**

**ANNUAL PROGRESS REPORT**

Reporting From: 04/30/2006

Reporting To: 04/29/2007

58.988% AIDS Related

withheld



Patent or Copyright was not awarded this grant year.

# PERSONNEL ROSTER

## Core Doctoral Scientists

Name, Degree	Department	Non-Host Institution: State, Country
withheld		

**Core Doctoral Scientists**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		

**Affiliated**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		
		Proprietary Info
		TEXAS A&M: TX, USA
		Proprietary Info
		Proprietary Info
		UNIVERSITY OF ILLINOIS: IL, USA
		Proprietary Info
		LSU HEALTH SCIENCES CENTER: LA, USA
		WANPRC: WA, USA
		Proprietary Info
		LSU HEALTH SCIENCES CENTER: LA, USA
		LSU: LA, USA
		Proprietary Info
		Proprietary Info
		UNIVERSITY OF CA/SF: CA, USA
		Proprietary Info
		SUNY: NY, USA

**Affiliated**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		Proprietary Info
		LOUISIANA STATE UNIVERSITY: LA, USA
		Proprietary Info
		UNIV. OF NORTH CAROLINA/CHARLOTTE: NC, USA
		NIH: MD, USA
		UNIVERSITY OF NEW ORLEANS: LA, USA
		Proprietary Info
		UNIVERSITY OF MISSOURI-COLUMBIA: MO, USA
		Proprietary Info
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		Proprietary Info

**Affiliated**

**Name, Degree**

**Department**

**Non-Host Institution: State, Country**

withheld

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Proprietary Info

VACCINE RESEARCH CENTER, NIH:  
MD, USA

Proprietary Info

Proprietary Info

UNIVERSITY OF  
WISCONSIN-MADISON VET SCHOOL:  
WI, USA

UNIVERSITY OF NEBRASKA VET  
SCHOOL: NE, USA

Proprietary Info

NIAD/NIH: MD, USA

Proprietary Info

YERKES PRIMATE CENTER: GA, USA  
UNIVERSITY OF IOWA: IA, USA

Proprietary Info

LSU HEALTH SCIENCES CENTER: LA,  
USA

Proprietary Info

Proprietary Info

UNIVERSITY OF TX HEALTH  
CENTER: TX, USA

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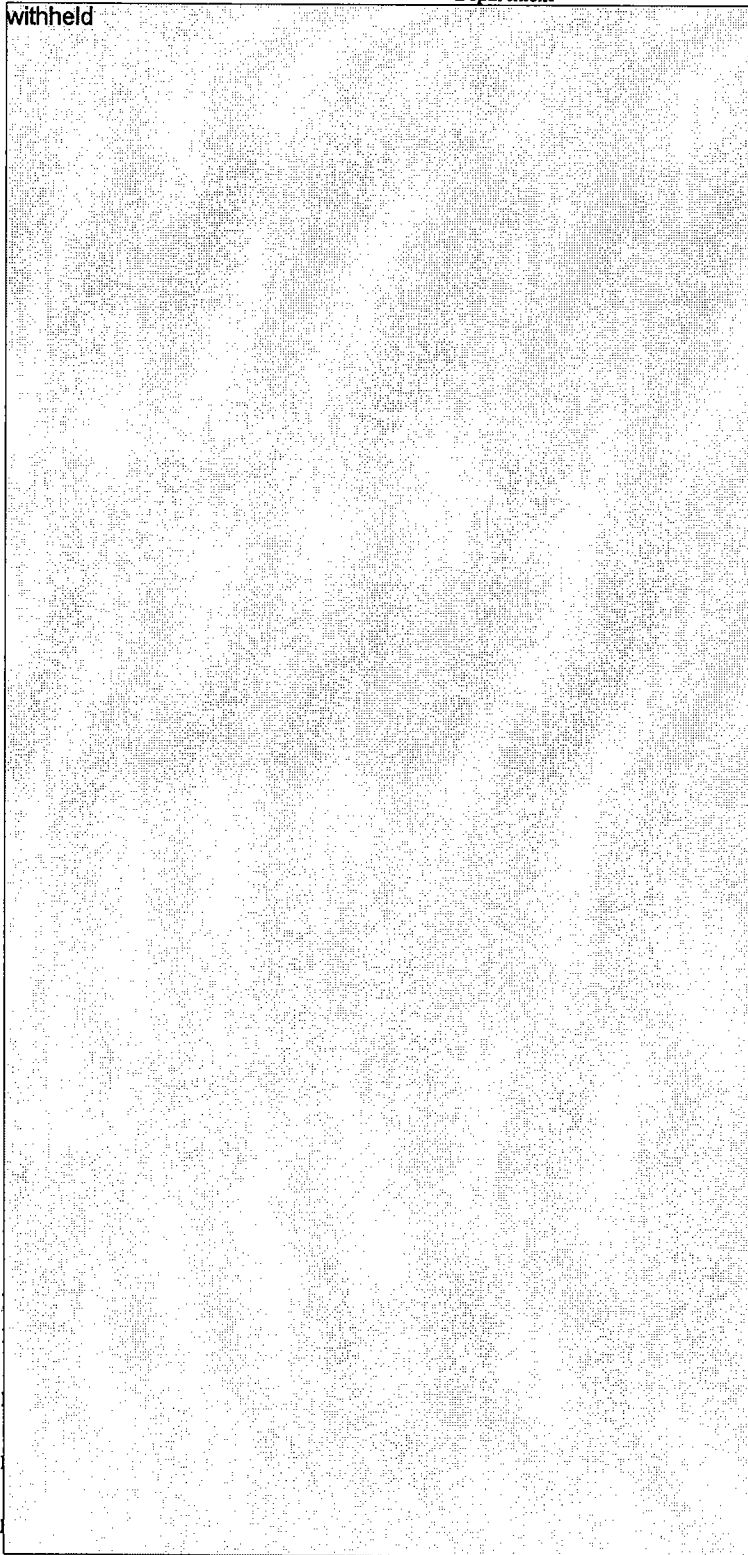
**Affiliated**

Name, Degree

Department

Non-Host Institution: State, Country

withheld



Proprietary Info

UNIVERSITY OF COLORADO HSC:  
CO, USA

PENNINGTON/LSU: LA, USA

Proprietary Info

UNIVERSITY OF ARKANSAS: AR,  
USA

Proprietary Info

LSU: LA, USA

Proprietary Info

Proprietary Info

Proprietary Info

Proprietary Info

Proprietary Info

Proprietary Info

ONPRC: OR, USA

NIH: MD, USA

Proprietary Info

Proprietary Info

COLLEGE OF VETERINARY  
MEDICINE: CO, USA

Proprietary Info

**Affiliated**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		Proprietary Info
		Proprietary Info
		UNIVERSITY OF CINCINNATI: OH, USA
		UNIVERSITY OF TX/SOUTHWESTERN: TX, USA
		CDC: CO, USA
		Proprietary Info
		Proprietary Info
		Proprietary Info
		NEW ENGLAND NATIONAL PRIMATE RESEARCH CENTER: MA, USA
		Proprietary Info
		LSUHSC: LA, USA
		Proprietary Info
		Proprietary Info
		LSU SCHOOL OF VETERINARY MEDICINE: LA, USA
		Proprietary Info
		Proprietary Info
		Proprietary Info
		LSU: LA, USA
		NIAID/NIH: MD, USA
		LSU SCHOOL OF VETERINARY MEDICINE: LA, USA
		Proprietary Info
		UCLA SCHOOL OF MEDICINE: CA, USA
		Proprietary Info

**Affiliated**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		Proprietary Info
		Proprietary Info
		Proprietary Info
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		Proprietary Info
		LSU: LA, USA Proprietary Info
		NCI FREDERICK: MD, USA Proprietary Info
		UNIVERSITY OF VERMONT: VT, USA Proprietary Info
		UNIVERSITY OF COLORADO: CO, USA Proprietary Info
		UNIVERSITY OF COLORADO HSC: CO, USA Proprietary Info
		Proprietary Info
		NIH/NIAID: MD, USA Proprietary Info
		UNIVERSITY OF RHODE ISLAND: RI, USA
		NIH VACCINE RESEARCH CENTER: MD, USA Proprietary Info
		Proprietary Info



**Affiliated**

**Name, Degree**

**Department**

**Non-Host Institution: State, Country**

withheld

UNIV OF CALIFORNIA/DAVIS: CA, USA

SOUTHWESTERN MEDICAL

CENTER: TX, USA

Proprietary Info

LSUHSC: LA, USA

Proprietary Info

LSUHSC: LA, USA

Proprietary Info

Proprietary Info

Proprietary Info

NIAD/NIH: MD, USA

Proprietary Info

UNIVERSITY OF PITTSBURGH: PA, USA

Proprietary Info

UNIVERSITY OF KANSAS MED CTR.: KS, USA

NIH: MD, USA

WANPRC: WA, USA

LSU HEALTH SCIENCES CENTER: LA, USA

Proprietary Info

ONPRC: OR, USA

Proprietary Info

UNIVERSITY OF CALIFORNIA/DAVIS: CA, USA

UNIVERSITY OF TX/HOUSTON MEDICAL SCHOOL: TX, USA

UNIVERSITY OF

WISCONSIN-MADISON: WI, USA

Proprietary Info

**Affiliated**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		Proprietary Info
		LSUSVM: LA, USA UNIVERSITY OF NEW MEXICO: NM, USA
		Proprietary Info
		Proprietary Info
		Proprietary Info
		UNIVERSITY OF TX MEDICAL BRANCH: TX, USA LSUSVM: LA, USA
		Proprietary Info
		NCI-FREDERICK CANCER RESEARCH & DEVELOPMENT: MD, USA
		LSU/HSC: LA, USA UNIVERSITY OF NEW MEXICO: NM, USA
		Proprietary Info
		Proprietary Info
		Proprietary Info

Proprietary Info

LSUSVM: LA, USA  
UNIVERSITY OF NEW MEXICO: NM, USA

Proprietary Info

Proprietary Info

Proprietary Info

UNIVERSITY OF TX MEDICAL  
BRANCH: TX, USA  
LSUSVM: LA, USA

Proprietary Info

NCI-FREDERICK CANCER  
RESEARCH & DEVELOPMENT: MD, USALSU/HSC: LA, USA  
UNIVERSITY OF NEW MEXICO: NM, USA

Proprietary Info

Proprietary Info

Proprietary Info

VACCINE RESEARCH CENTER, NIH:  
MD, USA

Proprietary Info

NIAID, NIH: MT, USA

Proprietary Info

**Affiliated**

**Name, Degree**

**Department**

**Non-Host Institution: State, Country**

withheld

Proprietary Info

ALABAMA STATE UNIVERSITY: AL,  
USA

Proprietary Info

NERPRC: MA, USA

ALABAMA STATE UNIVERSITY: AL,  
USA

Proprietary Info

UNIVERSITY OF TEXAS: TX, USA

Proprietary Info

UNIVERSITY OF IOWA: IA, USA

YERKES NAT. PRIMATE RES. CTR.:  
GA, USA

UNIVERSITY OF CINNCINATI: OH,  
USA

Proprietary Info

UNIVERSITY OF TX MEDICAL

BRANCH: TX, USA

Proprietary Info

LOUISIANA STATE UNIVERSITY: LA,  
USA

Proprietary Info

COLORADO STATE UNIVERSITY:  
CO, USA

**Affiliated**

Name, Degree	Department	Non-Host Institution: State, Country
withheld		<p>CNPRC/UC DAVIS: CA, USA UNIVERSITY OF TEXAS MEDICAL BRANCH: TX, USA Proprietary Info</p> <p>LSUHSC: LA, USA NIH/NIAID: MD, USA Proprietary Info</p> <p>UNIVERSITY OF VERMONT COLLEGE OF MEDICINE: VT, USA Proprietary Info</p> <p>NERPRC: MA, USA Proprietary Info</p> <p>LSUHSC: LA, USA</p> <p>WISCONSIN NATIONAL PRIMATE RESEARCH CENTER: WI, USA OREGON NATIONAL PRIMATE RESEARCH CENTER: OR, USA Proprietary Info</p> <p>NERPRC: MA, USA Proprietary Info</p> <p>UNIVERSITY OF TEXAS MEDICAL BRANCH: TX, USA Proprietary Info</p>

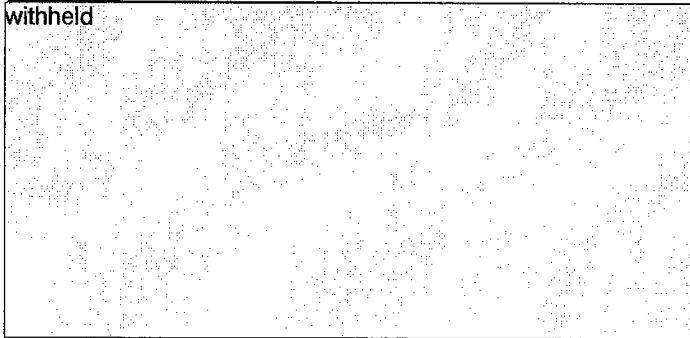
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**Name, Degree**

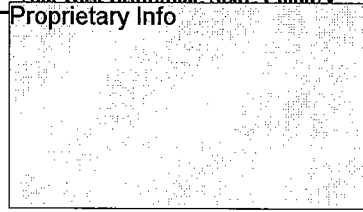
**Department**

**Non-Host Institution: State, Country**

withheld

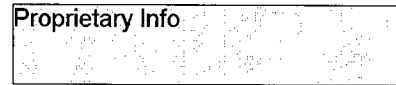


Proprietary Info



UNIVERSITY OF COLORADO: CO,  
USA

Proprietary Info



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## **SUBPROJECT DESCRIPTIONS**

### **NPRC MANAGEMENT SUBPROJECTS**

**INFORMATION TECHNOLOGY SERVICES (0542)**

NPRC UNIT: ADMINISTRATIVE

%NPRC \$:

INVESTIGATOR	DEGREES	STAFF	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
		CODE		

withheld

**SUBPROJECT DESCRIPTION**

The mission of the Information Technology Unit is to provide technology support for the faculty and staff of the Tulane National Primate Research Center, including maintaining an animal records system database, assisting with desktop and network computing, and assisting with multimedia presentation development and production. IT provides support for a complete clinical animal records system, which provides clinical veterinarians, clinical lab technicians, pathologists and research scientists the ability to enter and retrieve data on the research animals. Besides the necessary maintenance and reporting, the primary issue facing the IT unit database staff was a migration from the P/OPEN DBMS to MS SQL Server. This project was begun in late December of 2002, but was put on hold because of increased demands on the database staff. We expect its completion by mid-2007. Desktop Support staff provides support for Windows-based and Macintosh computers, laser printers and other devices comprising a nearly 300 node 100BaseT Ethernet network. The campus has six main network servers. Solaris-based server provide e-mail access and access to the animal records system, while Windows 2003 servers act as file servers for both Macintosh and Windows-based desktop clients. Internet access is provided through a DS 3 circuit interconnecting the TNPRC to the Tulane University uptown campus. Desktop support personnel custom-build and repair Windows-based PCs. They advise staff on the purchase of computer hardware and software. They also install site licensed and public domain software for all computers and assist users in maintenance and system upgrades. Technical support calls numbered over 2,800 currently. The Media Lab staff provides multimedia production support by assisting with the following: slide presentation production, 35mm slide creation, 35mm slide scanning, document and image scanning, color document and image creation, video production (including filming and editing), and research poster creation. This lab receives dozens of requests each week for service. The Media Lab continues to grow, with new digitizing equipment, improved 35mm slide production, better color print processing and better video presentation equipment. During the year video conferenced presentations are regularly scheduled and coordinated.

**ADMINISTRATIVE SERVICES/BUSINESS OFFICE (0583)**

NPRC UNIT: ADMINISTRATIVE

%NPRC \$:

INVESTIGATOR	DEGREES	STAFF	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
		CODE		

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**SUBPROJECT DESCRIPTION**

Because the Center is located Personal Info from the University, the Center Division of Administrative Services is the central point of contact for Center faculty and staff for virtually all financial and administrative functions. All transactions submitted by the Primate Center are reviewed and approved by the Business Office to assure compliance with both Federal and University regulations and policies. Pre and post grant and contract award functions processed by Grants Administration include budget preparation and application submission, award administration, account reconciliation and all required financial reporting. Both annual and five-year base grant budgets are prepared as well. Cost recovery rates are set and administered for all research studies, both internal and outside collaborative. Billable outside collaborative projects are invoiced and their payments processed by the Business Office. Administrative Services staff work closely with IT staff in developing and maintaining databases and applications for the tracking of animal assignments and acquisitions, project cost recovery and various administrative records. All aspects of Human Resources are handled by the Division of Administrative Services, including hiring and termination of employees, initiation and distribution of payroll, on the job injury reporting, employee counseling, etc. General support services are provided, including reception, switchboard, maintenance of telephone and radio systems, postage and shipping and Center wide central filing.



**FACILITIES SERVICES (0584)**

**NPRC UNIT:** ADMINISTRATIVE

**%NPRC \$:**

INVESTIGATOR	DEGREES	STAFF CODE	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
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withheld
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**SUBPROJECT DESCRIPTION**

Facilities Services is responsible for maintenance, building construction and renovations, HVAC systems and controls, groundskeeping, chemclave and tissue digester operation, sewerage treatment plant operation, and day-to-day operations in the power plant and boiler room. The unit is also responsible for compliance with relevant local, state and federal regulations that govern the Center's facilities operations.

Facilities Services maintains eight main buildings (approximately 110,000 ft<sup>2</sup>) and 69 primate corrals located on the Center's 500 acres. In addition to the eight main buildings, the Center has numerous other buildings such as generator sheds and storage buildings that support the Center's operations.

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**OFFICE OF OCCUPATIONAL HEALTH AND SAFETY (0684)**

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**NPRC UNIT:** ADMINISTRATIVE

**%NPRC \$:**

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**INVESTIGATOR**

**DEGREES STAFF DEPARTMENT**

**NON-HOST INSTITUTION: STATE,  
COUNTRY**

withheld

Proprietary Info

**SUBPROJECT DESCRIPTION**

The Occupational Health and Safety Officer (Nurse Specialist) has implemented an active risk assessment database, an occupational health and safety educational program and active Tetanus/Diphtheria and Hepatitis B vaccination programs. New databases have been established to track TB screening and vaccinations. Databases have been established for injury reporting/risk assessment and health education. The Nurse Specialist works closely with several affiliated physicians to provide case management of employee illnesses and injuries. There is a focus on simian Herpes B virus prevention and SIV/SHIV transmission prevention. We also, participate in a collaborative project with CDC to test for monkey retrovirus seroprevalence in employees at the primate center.

**SECURITY (0695)**

NPRC UNIT: ADMINISTRATIVE

%NPRC \$:

INVESTIGATOR	DEGREES	STAFF	DEPARTMENT	NON-HOST INSTITUTION: STATE,
		CODE		COUNTRY

withheld				
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**SUBPROJECT DESCRIPTION**

Security functions at the Center are now performed by **Proprietary Info** from the **Proprietary Info**  
**Proprietary Info** Officers are on-site 24 hours a day to respond to incidents, conduct routine patrols, provide after-hours escorts and liaise with local law enforcement agencies.

**INFRASTRUCTURE IMPROVEMENTS TO THE TNPRC (0811)**

NPRC UNIT: ADMINISTRATIVE

%NPRC \$:

INVESTIGATOR	DEGREES	STAFF CODE	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
withheld				Proprietary Info

**SUBPROJECT DESCRIPTION**

The growth in the TNPRC program has produced obvious demands on the infrastructure of the Center. To accommodate this growth we have aggressively pursued funding from multiple sources to renovate and expand existing facilities and have been successful in securing roughly \$50 million from multiple sources to: 1) renovate and expand existing animal facilities and the veterinary clinic, 2) construct a new quarantine building, 3) construct a new veterinary clinic for the breeding facility, 4) upgrade existing security 5) build a regional biosafety laboratory, 6) construct new animal holding facilities, 7) purchase caging; and 8) expand the breeding colony housing capacity. The completion of these construction and renovation projects over the next few years will increase the square footage of our facility by over 70%. Our success in obtaining this funding was facilitated by the development of a TNPRC strategic plan and a campus master plan.

**DIRECTORS OFFICE, TNPRC (0585)**

NPRC UNIT: ADMINISTRATIVE

%NPRC \$:

INVESTIGATOR	DEGREES	STAFF	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
		CODE		

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**SUBPROJECT DESCRIPTION**

The Director's Office provides oversight and overall responsibility for the scientific, administrative and operational functions of the Center. The Director, with input from the Executive Committee, faculty and the Board of Scientific Advisors, develops and implements the scientific direction and planning for the Center. This includes determining future funding opportunities, long range strategic planning, establishing collaborative agreements with other institutions and representing the Center's interests with our host institution and funding institutions. The Director's Office is also responsible for allocation of resources to the various departments at the Center.

Administrative and Operational oversight is also provided from the Director's Office with primary responsibility for supervision of Administrative Services, Facilities Services and IT Services. Each of these units has a manager who reports to the Director's Office.

Three significant goals were achieved during the year: 1) recruitment of additional faculty in the Division of Microbiology (Roy); 2) recruitment of an additional clinical veterinarian; and 3) creation of a TNPRC website.

**SCIENTIFIC ADVISORY COMMITTEE (0773)**

NPRC UNIT: ADMINISTRATIVE

%NPRC \$:

INVESTIGATOR	DEGREES	STAFF CODE	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
withheld				Proprietary Info
				SUNY, NY USA
				Proprietary Info
				UNIVERSITY OF WASHINGTON NATIONAL PRIMATE RESEARCH CENTER, WA USA
				Proprietary Info
				COLLEGE OF VETERINARY MEDICINE, CO USA NIAID/NIH, MD USA LSU SCHOOL OF VETERINARY MEDICINE, LA USA UNIV OF CALIFORNIA/DAVIS, CA USA UNIVERSITY OF KANSAS MED CTR., KS USA NIAID, NIH, MT USA
				Proprietary Info

**SUBPROJECT DESCRIPTION**

The TNPRC maintains an external scientific advisory board comprised of outstanding scientists from around the country with expertise in areas of research being conducted at the Primate Center. The term for committee members is 3 years. This Committee conducts regular reviews of all Center programs. Two complementary types of reviews are conducted. The first is a general overview of all components of the institution. This occurs every 18 to 24 months. The second type of review is focused on single research divisions. These reviews are much more in depth. Two research Divisions are reviewed each year. Together these complementary reviews provide thorough oversight of all center programs.

The Divisions of Veterinary Medicine and Collaborative Research were reviewed in November of 2006 and a global review occurred in February of 2007.

**TRAINING AND EDUCATION (0774)**

**NPRC UNIT:** ADMINISTRATIVE

**%NPRC \$:**

INVESTIGATOR	DEGREES	STAFF CODE	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
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withheld

LSU HEALTH SCIENCES CENTER, LA  
USA  
LSU, LA USA

LOUISIANA STATE UNIVERSITY, LA  
USA

UNIV. OF NORTH  
CAROLINA/CHARLOTTE, NC USA

Proprietary Info

Proprietary Info

LSU SCHOOL OF VETERINARY  
MEDICINE, LA USA

LSU SCHOOL OF VETERINARY  
MEDICINE, LA USA

Proprietary Info

LSU HEALTH SCIENCES CENTER, LA  
USA

Proprietary Info

Proprietary Info

**SUBPROJECT DESCRIPTION**

The educational mission of the TNPRC is to provide training for undergraduate, veterinary, and graduate students, post-doctoral fellows, veterinarians, and visiting scientists. In addition to hosting graduate students and post-docs, the educational effort of the TNPRC is further broadened by participation in a T35 training grant in conjunction with the Louisiana State University (LSU) School of Veterinary Medicine, a T32 training grant held together with

the LSU School of Medicine, a Summer Fellowship Program, a Pathology Training Curriculum, and a Veterinary Preceptorship. The summer fellowships entail one-on-one participation in a research project with an end-of-summer seminar session by the students to demonstrate their understanding of the work. There is also a Visiting Scientist Program. The basic objective of this program is to provide individuals with a knowledge and understanding of the mission and functions of a National Primate Research Center. A newly instituted Pathology Training Curriculum is directed toward further professional development of staff veterinary pathologists, staff veterinarians, and veterinarians involved in research. Lastly, three Center-wide colloquia address TNPRC diverse educational needs and interests: 1) a monthly seminar on infectious diseases, with invited speakers, 2) a biweekly research lab meeting, and 3) monthly pathology and medicine Grand Rounds.

In the last year the center hosted as many as 9 graduate students and 19 post-doctoral fellows, as well as 4 students in the Preceptorship Program. The Summer Fellowship Program was subscribed somewhat less than in the previous year (7 vs. 12 participants), likely due to aftermath effects of Hurricane Katrina. Three veterinarians participated in the Pathology Training Curriculum. We also welcomed 4 visiting scientists last year. We are pleased with the response of students and investigators of all levels to our educational efforts, and look forward to maintaining this trend in the future.



**TULANE RESOURCE ALLOCATION COMMITTEE (0686)**

**NPRC UNIT:** VETERINARY MEDICINE

**%NPRC \$:** AIDS RELATED RESEARCH

INVESTIGATOR	DEGREES	STAFF	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
	CODE			

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Proprietary Info

LSU HEALTH SCIENCES CENTER, LA  
USA

**SUBPROJECT DESCRIPTION**

The Tulane Resource Allocation Committee (TRAC) is composed of core and affiliate members who are responsible for the equitable allocation of animal resources.

The sixth year of operation of the TRAC saw continued refinement of operations of the committee, development of policy statements, and better reporting and analysis of allocation data. Analysis of breeding colony demographic, morbidity, and mortality data as well as allocation data assist in colony management decision-making. A total of 39 investigator requests were made for a total of 405 animals. Approximately of 67% of the animals allocated have been to affiliate (outside) investigators and 38% to core investigators for the last reporting period. Because of the rapid growth of the research program, 29 investigator requests for 292 animals were initially deferred until housing space and/or animals were available for assignment. Three requests (37 animals) were denied in 2006.

## **RESEARCH SUBPROJECTS**

**TESTING OF EXPERIMENTAL 4 AMINOQUINOLINES IN MONKEY MODELS OF HUMAN MALARIA (0627)**

NPRC UNIT: BACTERIOLOGY/PARASITOLOGY

%NPRC S: 0.664%

INVESTIGATOR	DEGREES	STAFF	DEPARTMENT	NON-HOST INSTITUTION: STATE,
		CODE		COUNTRY

withheld

Proprietary Info

**SUBPROJECT DESCRIPTION**

Malaria, an ancient scourge of mankind, is still one of the biggest killers of children in the world today. The treatment of choice for malaria for over 50 years has been chloroquine (CQ) but the utility of this drug has been compromised by the increasing prevalence of CQ resistance worldwide. Consequently, the development of safe and effective antimalarials is a global health priority. Together with our colleagues at the **withheld** **Propriet** we have developed a series of 4 aminoquinolines active against chloroquine-resistant malaria caused by *Plasmodium falciparum*. We have previously tested a series of these compounds in a monkey model of human malaria, *P. cynomolgi* in the rhesus macaque, a model of human vivax malaria. One of the compounds we tested previously (AQ13) was found to be an efficacious blood schizonticide against a chloroquine resistant isolate in the monkeys, has completed Phase I human trials, and is currently being tested in Phase II trials in Mali. We are now looking at the efficacy of other compounds which can potentially be used in combination with AQ13. Using our monkey models we are now looking at how this class of compounds is metabolized by P450 enzymes in the liver. Because the P450 complement of the rhesus macaque is similar to that of humans, we are not only able to assess efficacy but have the ability to look at pharmacokinetic parameters, including absorption, bioavailability, AUC, rate of excretion, and other factors which may be predictive of the ability of these compounds to be used for treatment of human malaria.

**SURVEY OF ENZOOTIC PATHOGENS AND ARTHROPOD VECTORS (0697)**

**NPRC UNIT:** BACTERIOLOGY/PARASITOLOGY

**%NPRC \$:** 0.664%

INVESTIGATOR	DEGREES	STAFF CODE	DEPARTMENT	NON-HOST INSTITUTION: STATE, COUNTRY
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Proprietary Info
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**SUBPROJECT DESCRIPTION**

A survey designed to assess the level of endemicity of known enzootic pathogens in the outdoor breeding colonies at the TNPRC, this project serves as a sentinel for the health of the colony. Samples of blood and stool obtained from each animal are examined for parasites of interest. Stool samples are examined by a direct smear and a concentration method. Blood samples are examined by thick and thin blood smears for Plasmodium species and the Knott's test for filariasis. Plasma is examined by ELISA for evidence of Trypanosoma cruzi and DNA is saved for future studies. Potential vectors are trapped weekly by CDC light traps and gravid traps. Mosquitoes are speciated and examined by dipstick ELISA test or the newly-developed LAMP test for West Nile virus (WNV). During 2006 we examined 442 stool samples and 590 blood samples. We have also saved and tested 208 serum samples for T. cruzi and have found 34 animals which show evidence of exposure to T. cruzi. We have been able to culture parasites in vitro from some infected animals and are presently re-sampling mothers of infected animals to look for evidence of vertical transmission of this parasite. Many of these animals were born at the Center indicating transmission is taking place here with local triatomid bugs. We spent some months this year attempting the trap the vector at night but have so far been unsuccessful. Other pathogens of interest include Strongyloides fülleborni, Giardia lamblia, Balantidium coli, Trichuris trichiura, and Hymenolepis diminuta, the rat tapeworm. We have expanded our sampling to include milk from mothers with babies by to demonstrate vertical transmission of S. fülleborni. This parasite has been shown to be present in the milk of African women. Its presence in the milk of simian mothers will be an indication that new treatment approaches need to be developed to help reduce the morbidity caused by this organism in our breeding colony.

