

2002-2005 Assistant Researcher, Environmental Microbiology Laboratory,
Nicholls State University, Dr. Ramaraj Boopathy

Summer 2004 Research Associate, Ophthalmology and Neuroscience Laboratory,
Louisiana State University, Health Sciences Center, Dr. William Gordon

2005-2006 Assistant Researcher, Molecular Genetics Laboratory, Nicholls
State University, Dr. John Doucet

2005-2006 PhD Candidate, Louisiana State University

July - August 2005: Rotation

Cell Biology and Anatomy, Dr. Judith Venuti

January – March 2005: Rotation

Pharmacology, Dr. Wayne Backes

March – May 2005: Rotation

Genetics, Dr. Bronya Keats

May 2005 – July 2005: Rotation

Genetics, Dr. Diptasri Mandal

July 2006 – June 2008 PhD Candidate, Genetics, Dr Bronya Keats

Nov. 2008-June 2011 Research Associate/Oral Biology Core Manager, Louisiana State
University Health Sciences Center, School of Dentistry
(Supervisor: Dr. Thomas Lallier)

July 2011-Nov. 2011 Research Associate II, Louisiana State University Health Sciences Center, Department of Pharmacology

Nov. 2011- July 2011 Research Associate, Xavier University of Louisiana, Division of Basic Pharmaceutical Sciences (Supervisor: Dr. KiTani Parker-Johnson)

July 2011-January 2013 Research Associate, Xavier University of Louisiana, Division of Basic Pharmaceutical Sciences (Biochemistry Laboratory)

February 2013-July 2014 Research Associate II, Louisiana State University Health Sciences Center, School of Dentistry (Prosthodontics Laboratory)

MAJOR AREAS OF RESEARCH EXPERIENCE AND INTEREST

1. Prosthodontics: Rat Denture Stomatitis
2. Microenvironment of Denture Stomatitis
3. Breast Cancer Microenvironment Impact on Surrounding Tissues
4. Migration, Metastasis and Invasion Occurring during breast cancer
5. Smoking and Alcohol and their Effects on the Periodontal Ligament and Surrounding Gingival Tissues
6. Mouthwashes and their Effects on the Gingival Tissues
7. Maintenance of the Extracellular Matrix within the Periodontal Ligament
8. Cell Motility, Morphology, Proliferation and Migration of the Periodontal Ligament Fibroblasts
9. Changes in Gene expression of the Periodontal Ligament Fibroblasts
10. Genetic Disorders, Usher Syndrome Type IC, in the Acadian Population

11. Genetics of Deafness and Hearing Impairment in Mouse and Man
12. Genetics of Blindness, Retinitis Pigmentosa, in Mouse and Man

PROFICIENT IN THE FOLLOWING LABORATORY TECHNIQUES:

1. Cell Culture
2. Primary Cell Culture of Human Breast Epithelia
3. Animal Microsurgery
4. Tumor Implantation in Mice
5. BioPlex
6. Laser Capture Microscopy
7. SEM Preparation
8. Microscopy
 - a. Fluorescence
 - b. Phase
9. Western Blotting
10. Standard PCR
 - a. Primer design
 - b. Nested PCR
11. Reverse Transcriptase PCR
12. Immunohistochemistry
 - a. TUNEL
 - b. Antibody staining
13. Cryosectioning
14. Paraffin Sectioning
15. Tissue Isolation from mice and rats
16. Protein isolation from mouse tissues and human cells

17. RNA isolation from mouse tissues and human cells
18. DNA isolation from mouse tail snips and human cells
19. Mouse Genotyping
20. Plasmid preparation
 - a. Site-directed mutagenesis
 - b. Bacterial Transformation
21. Media Preparation
22. Solution Preparation
23. Gel Elutions
24. PCR Purifications
25. Sequence Identification
26. Installation of Rat Dentures
27. Confocal Microscopy
28. Electron Microscopy
29. Formation of Rat Dentures