

## New Orleans

The 300-year-old city of New Orleans is renowned for its unique European atmosphere, warm hospitality, and rich cuisine. However, New Orleans is also recognized as the financial and business center of the Central Gulf Coast. The

New Orleans greater metropolitan area encompasses 1.5 million people and supports five major universities. The city is bordered on the north by Lake Pontchartrain and on the south by winding bends of the lower Mississippi River.

The French Quarter, with its rich cultural heritage, is within easy walking distance of the LSU Health Sciences Center campus, which is situated immediately north of the central business district and adjacent to the

Louisiana Superdome. Also nearby are the Canal Street shopping area, Riverwalk and Jackson Brewery shopping complexes, Aquarium of the Americas, and the Warehouse and Arts District.



Mardi Gras, the most famous New Orleans event, occurs in the early spring and is quickly followed by the internationally-acclaimed Jazz and Heritage Festival in addition to many local and regional cultural, artistic, and theatrical offerings. The city enjoys a pleasant

subtropical climate that allows outdoor activities throughout the year. Close proximity to the Gulf of Mexico and the surrounding natural wetlands offers a unique opportunity for outdoor recreation and wildlife observation.

## Faculty Degrees and Research Interests

### Alahari, Suresh K.

*Associate Professor*  
PhD, 1994,  
Drexel University  
Biochemistry of cell adhesion; mechanism of action of Nischarin in tumor cell migration and invasion

### Chiu, Thang

*Assistant Professor*  
PhD, 2001, University of California, Los Angeles  
Crystallographic and biochemical studies of proteins involved in HIV/AIDS, diabetes and innate immunity; protein folding and the role of conformational changes on protein structure and function

### Claycomb, William

*Professor*  
PhD, 1969,  
Indiana University  
School of Medicine  
Biochemistry of cardiac muscle cell differentiation; biochemistry of cell proliferation; cell cycle control

### Desai, Shyamal

*Assistant Professor*  
PhD, 1991,  
University of Bombay  
Roles of ubiquitin and ubiquitin-like proteins in tumorigenesis; mechanism of tumor cell death and drug resistance

### Geng, Chuan-dong

*Research Assistant Professor*  
PhD, 1999, Shanghai Institute of Biochemistry  
Glucocorticoid induced apoptosis of B-cell acute lymphoblastic leukemia

### Haas, Arthur

*Roland Coulson Professor and Head*  
PhD, 1979, Northwestern  
University School of Medicine  
Ubiquitination; the roles of ubiquitin and ISG15 conjugation in cellular regulation

### Huh, Kyungwon

*Assistant Professor*  
PhD, 2001,  
University of Colorado  
Oncogenic mechanisms of human papillomaviruses (HPV)

### Kim, Sunyoung

*Assistant Professor*  
PhD, 1994,  
University of Michigan  
Biochemistry and biophysics of protein families involved in cell cycle, DNA repair, and signal transduction; chemical and structural tuning of proteins to diverse biological functions

### Vedeckis, Wayne V.

*Amgen Professor of Oncology*  
PhD, 1974,  
Northwestern University  
Steroid hormone action; structure, function, and genomic interactions of glucocorticoid receptor proteins; steroid hormone regulation of proto-oncogene expression and cellular proliferation; leukemia

### Wojcik, Edward

*Assistant Professor*  
PhD, 1994,  
University of Michigan  
Animal cell division, mitosis, and cancer by studying cytoskeletal processes during cell division, including centrosome duplication and the regulation of microtubule motor proteins

### Worthylake, David

*Assistant Professor*  
PhD, 1998, University of Utah  
Structural approach focusing on the molecular mechanisms by which IQGAP1 and Tiam1 destabilize cell-cell junctions

DEPARTMENT OF

BIOCHEMISTRY  
& MOLECULAR BIOLOGY

# Graduate Program



- Structural Biology
- Cancer Biology
- Cell Signaling
- Protein Trafficking
- Proteomics
- Cell Energetics
- Cardiac Stem Cell Development

LSU Health Sciences Center  
Medical Education Building  
Room 7101  
1901 Perdido Street  
New Orleans, Louisiana 70112



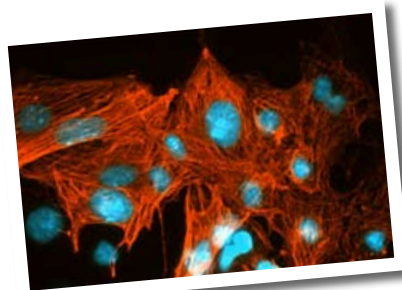


## Graduate Program

The LSU Health Sciences Center Graduate program in Biochemistry and Molecular Biology offers a stimulating environment for students and faculty with a shared interest in the chemistry of life. Faculty associated with this program comprise a spectrum of dedicated basic and clinical research scientists and are committed to educating and training the next generation of life scientists for successful research and leadership roles. This intellectual diversity strongly promotes many flavors of interdisciplinary research and offers broad expertise to our student body.

The Graduate Program in Biochemistry and Molecular Biology admits students directly into the Ph.D. program, wherein a course of study is pursued with three major components. First, students enroll in a core of advanced level interdisciplinary courses in biochemistry, molecular biology, and cell biology. Second, students participate in up to four

short-term research rotations as they settle on their primary research interests and host lab. Finally, students achieve candidacy and continue their dissertation research training. Throughout this course of study, there is commitment to providing mentoring for students that provides a sound foundation in leadership, ethics, and communication skills.



This well-rounded approach affords our graduates with the best tools with which to forge their own independent careers. The department takes pride in successfully having placed graduates in faculty positions in academia, as well as high ranking positions within biotech/pharmaceutical industries.

## Financial Aid

Every student accepted for graduate training in the Department of Biochemistry and Molecular Biology is provided full financial support that includes a generous nationally competitive fellowship to cover for living expenses and a complete tuition waiver to cover their course of study. Full financial support is provided without the requirement for undergraduate teaching.

## The Department

The Department of Biochemistry and Molecular Biology is one of six basic science departments that constitute an integral part of the LSU Health Sciences Center in New Orleans. The Department occupies laboratory space in the Medical Education Building and the Stanley S. Scott Cancer Research Center. Faculty members within the Department maintain active research programs funded by the National Institutes of Health, the National Cancer Institute, and other public and private agencies. Our laboratories perform internationally recognized biomedical research, with a focus in the areas of cancer cell biology, mitosis and the cytoskeleton, cell signaling and regulation, the ubiquitin pathway, cellular energetics leading to diabetes and obesity, and cardiac stem cell development.

The leadership within the LSU Medical School is committed to the pursuit of research and training excellence and has made a priority of ensuring that our research infrastructure is brought to and maintained at a highly competitive level. For example, the Department has committed significant resources

## Living and Housing

The Health Sciences Center maintains a residence hall for single and married students on the downtown campus. Affordable off-campus housing within an easy commute of 10-30 minutes is available in the historic French Quarter, the stylish Uptown area, or the quieter surrounding suburbs. The cost of living in New Orleans consistently ranks below the national average.



to establishing a Center for Structural Biology that houses both cell biological and biophysical resources to promote interdisciplinary approaches to problem solving from the atomic to systems level. A new X-ray crystallography suite for determining protein structure represents the cornerstone of this effort, while a state-of-the-art spectrometry suite provides complementary analysis of conformational and chemical dynamics in real time. The center also supports analysis of cellular protein dynamics by single molecule fluorescence and confocal instrumentation.

The Department of Biochemistry and Molecular Biology is currently in a phase of unprecedented expansion in which faculty size will nearly double within the next five years. Such growth promises to broaden the present areas of graduate training and to encourage a vibrant and intellectually stimulating environment.

## Contact Information

For additional information on the Department of Biochemistry and Molecular Biology, research interests of the faculty and the graduate program, we invite you to visit our web site at [www.medschool.lsuhs.edu/biochemistry/](http://www.medschool.lsuhs.edu/biochemistry/)

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