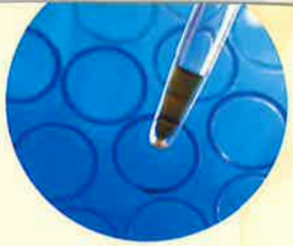
Success Story of Louisiana

CoBRE/INBRE

Centers of Biomedical Research Excellence

IDeA Networks of Biomedical Research Excellence



What is CoBRE?

The National Institutes of Health, National Center for Research Resources, Centers of Biomedical Research Excellence (CoBRE) program support thematic multidisciplinary centers that augment and strengthen institutional biomedical research capacity by expanding and developing biomedical faculty research capability.

This includes enhancing research infrastructure needed to carry out the objectives of a multidisciplinary, collaborative program.

CoBREs are expected to grow through the promotion of collaborative interactive efforts among researchers with complementary backgrounds, skills, and expertise; and to compete independently for external peer-reviewed center or program project grant support.

In some instances, CoBRE support will facilitate the development of new disease-specific research centers or augment the capability of existing centers.

LEADERSHIP

Nicolas Bazan, M.D., Ph.D.
Mentoring Neuroscience in Louisiana:
A Biomedical Program to Enhance Neuroscience
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Mentoring Neuroscience in Louisiana:

A Biomedical Program to Enhance Neuroscience

First Competitive Grant of This Type in Louisiana

NIH Funding for a Decade to Train Competitive Neuroscience Faculty

2002-2007 (9.8M) **2007-2012 (10.7M)**

Some of our Mentors:


Dr. Chu Chen


Dr. Sonia Gasparini


Dr. Jeffrey Tasker

This grant allowed the following major advances in bioscience:

- The establishment of a culture of Mentoring and Scientific Excellence in Neuroscience
- Neurosciences research performed in this environment is greatly synergized with respect to both quality and productivity; this new culture is playing a critical role in innovative and fundamentally important research breakthrough in the neurosciences at our institutions.
- The mentoring is important for the development of competitive faculty.
- Through our "culture of mentoring" approach, we are:
  - supporting research programs and pilot projects.
  - continuing to strengthen the quality of neuroscience research in Louisiana.
- Scientific focus: cellular and molecular bases of synaptic plasticity, regulation, and function.
- The projects contribute insights into dendritic function, neural information processing, and mechanisms of neuroprotection relevant to epilepsy, ischemia-reperfusion, deafness, language, and neurodegenerative diseases.
- The CoBRE mentoring plan – teams of mentors including junior mentors (successful former mentees) – aims to produce R01 applications by the mentees and is coupled with a recruitment plan to attract new research faculty.
- Our 'grantsmanship-plan' is designed to guide the mentees to become competitive in the application and peer-review process.
- "The overall objective of the research projects is to discover fundamental knowledge about brain function," said Dr. Bazan. "This is a necessary step to understand the disease process and to innovate with novel therapeutic approaches".
- Discovery of Brain Protection Signaling
  - Invention for a Treatment for Alzheimer's Disease, Stroke, Epilepsy, Neuropathic Pain and Blinding Retinal Degenerations in Dr. N. Bazan's laboratory
  - Discovery of Neuroprotectin D1
- Through mentoring, the following junior investigators obtained major grants:
  - **Sonia Gasparini,** Ph.D., R01 (NIH)
  - **Andrei Belousov,** Ph.D., R01 (NIH)
  - **Fiona Inglis,** Ph.D., NSF
  - **Chu Chen,** Ph.D., Alzheimer's Association and R01 (NIH)
- New Multidisciplinary Research Collaborations among institutions
- Dr. Jeffrey Tasker identified a novel mechanism that regulates feeding and stress
- Recruitment of several faculty to Louisiana

Mentees:


Dr. Royal Saunders


Dr. Gary LaFleur


Dr. Laura Harrison


Dr. Fiona Inglis


Dr. John Doucet


Hamilton Farris, Ph.D.
Neural Mechanisms of Speech Processing


Alberto Musto, MD, PhD.
Inflammatory Signaling in Epileptogenesis


Hugh Xia, Ph.D.
Neurabins/PP1 Targeting in Synaptic Plasticity


Laura Schrader, Ph.D.
Regulation of K+currents in Neuronal Excitability

LSU Health Sciences Center NEW ORLEANS

NICHOLLS STATE UNIVERSITY

Xavier University of Louisiana

Tulane University Health Sciences Center