The Tulane Center for Aging, founded in late 2007, is young and still growing. Our faculty is located across eight schools at the uptown and downtown campuses and the Tulane National Primate Research Center. We are the largest research organization in the Central Gulf Region engaged in generating new, translatable knowledge, across a wide array of disciplines, in a broad assault on the problems associated with aging. Our unique Interdisciplinary PhD Program in Aging Studies adds to these efforts by training the next generation of investigators and practitioners, and our focus on community healthcare is second to none in the New Orleans Metro Area. Center faculty members mirror the multidisciplinary focus of the center, whose goal is to foster interdisciplinary research on aging by assembling transdisciplinary teams. Our efforts are designed not only to combat the chronic and degenerative disorders of aging but more significantly to enhance healthy aging. The objective of this research is the development of interventions that will extend healthy lifespan and improve the quality of life of an aging population, an objective that can only be achieved through a coordination of efforts across many disciplines. It involves not only enhancement of physical and cognitive health, but also the social and community structures and environment that will contribute to the full realization of the potential the resulting human capital brings with it.

**Highlights for the 2013-2014 academic year**

- **Research**
  The research of the center’s faculty is supported by federal grant funding (NIH and NSF) of $17.5 million in 2013-2014, which is bolstered by private foundation research support.

  We have a Center of Biomedical Research Excellence in Aging and Regenerative Medicine funded by NIH.

  The Tulane Center for Aging is the home of the Louisiana Healthy Aging Study and the Healthy Aging Family Study. It also is a project leader in the Georgia Centenarian Study.

  Center research has shown that exercise regimens in the elderly may need to be tailored based on gender.

  Our members have found that genome instability caused by mobile DNA elements leads to cell senescence.

  Research in a member’s laboratory has shown that short-term estradiol treatment is sufficient to generate positive effects on cognitive function, thus avoiding the deleterious effects of long-term hormone replacement therapy.

  Center members are using novel engineered materials to guide neuronal growth, with the goal of developing therapies for age-related neurodegenerative disorders.

- **Education**
  The Tulane Interdisciplinary PhD Program in Aging Studies is based at the center. Students perform dissertation research in laboratories located in several schools at Tulane.

  Center members’ laboratories also provide education/research experiences for Tulane undergraduates and medical students.

- **Community Engagement**
  Our internship program partners with People Program to bring educational opportunities and social activities to seniors in the New Orleans area.
A model for the aging microvasculature provides the opportunity for testing therapeutic agents

The next-generation sequencing facility at the Tulane Center for Aging opens up new possibilities for understanding the genomics and epigenomics of aging

Adapting stem cells to repair “broken” hearts in elderly patients

Mapping changes in cognitive function during aging to different brain regions

Mobile DNA elements cause genome instability leading to cell senescence