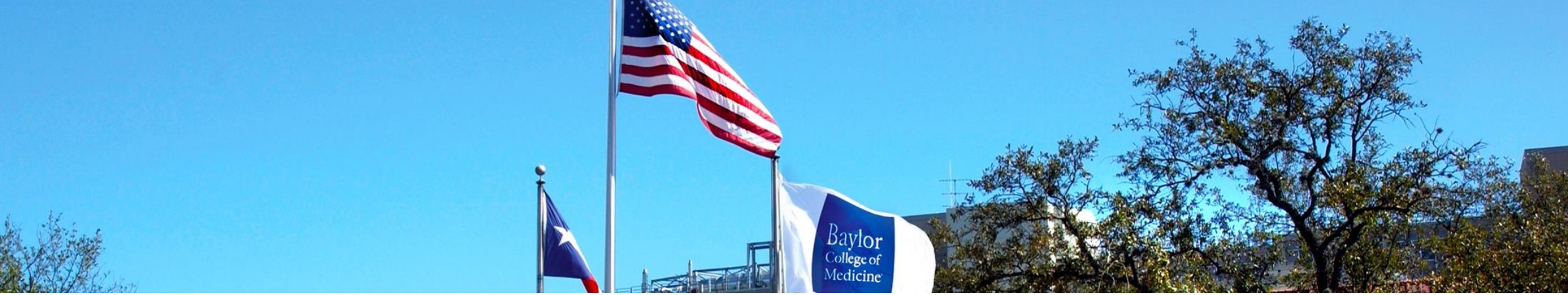


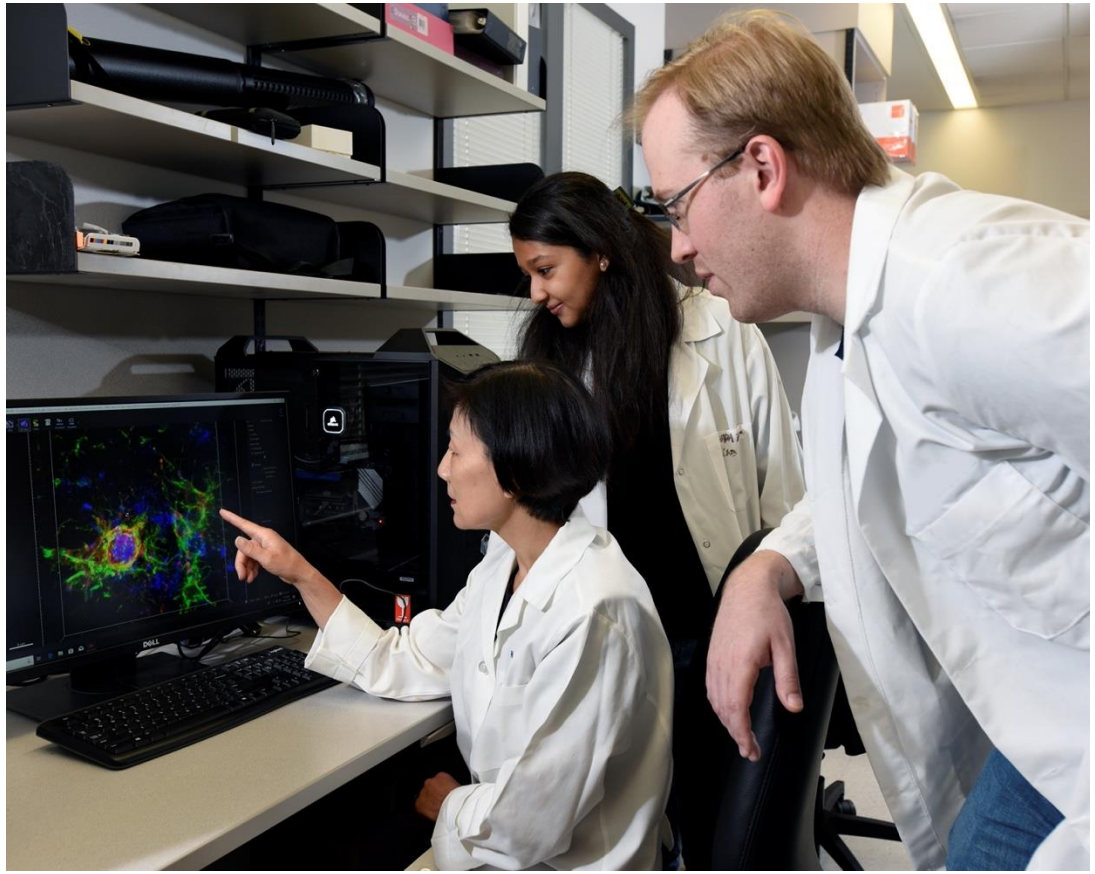
Baylor College of Medicine

Resources for Aging and Geroscience Research

Exploring programs and facilities advancing the science of aging biology

Baylor College of Medicine

Huffington Center on Aging



Established in 1988, HCOA is one of the nine academic centers at Baylor with a focus on basic research and education in understanding the biology of aging and promoting healthy longevity.

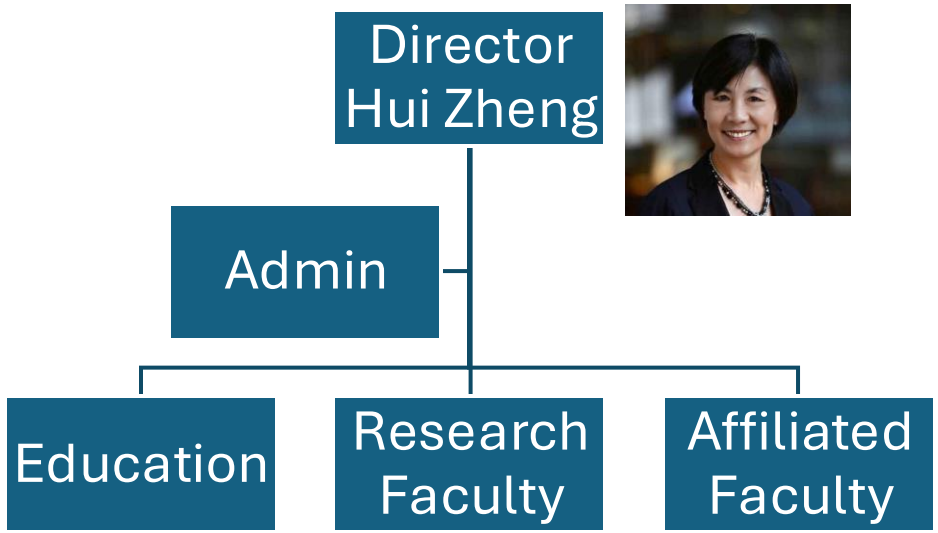
Located on the 8th and 9th floors of the Alkek Building at BCM main campus, HCOA provides >35,000 sq. ft. of research space, consisting of seven research laboratories, supported by >$10 million a year in grant funding and ~$35 million in endowment.

Biology of Aging Seminar Series

https://www.bcm.edu/academic-centers/huffington-center-on-aging/research/biology-of-aging-seminar

Huffington Distinguished Lectures

Past lecturers include Tom Rando, Liz Blackburn, John Hardy, Shelley Berger, David Sabatini, Fred Gage



Baylor College of Medicine

Faculty Expertise in Aging and Geroscience

HCOA Core Research Faculty

- **Andre Catic** – stem cell aging, protein quality control, proteosome, transcription factors, protein chaperones, mouse models
- **Weiwei Dang** – Epigenetics, histone modifications chromatin state, yeast aging, yeast genetics, worm aging, stem cell aging
- **Hongjie Li** – Single-cell sequencing, Drosophila genetics and aging, brain development, neuronal wiring
- **Ergun Sahin** – Telomere, telomerase KO mouse models
- **Melanie Samuel** – Mouse retina model, neurodegeneration, neurovascular coupling, synaptic connectivity, neuronal resilience,
- **Vishnu Dileep** – Brain aging mouse model, Neurodegeneration, DNA damage, genome organization, 3D genome architecture
- **Hui Zheng** – Alzheimer's Disease, AD mouse models, Aβ and tau pathologies, microglia, lysosome, etc

Baylor College of Medicine

Faculty Expertise in Aging and Geroscience

HCOA Affiliated Faculty and Other BCM Faculty

- **Rachel Arey** – Cognitive aging, learning and memory, C. elegans genetics, synaptic function, neuropeptide signaling
- **Blair Benham-Pyle** – Planarian flatworms model, tissue regeneration, stem cells, spatial genomics
- **Margaret (Peggy) Goodell** – Hematopoietic stem cells, stem cell aging, clonal hematopoiesis, stem cell quiescence, regenerative medicine
- **Indira Mysorekar** – Urinary Tract Infections (UTIs), bladder aging, estrogen and immune regulation, bladder organoids
- **Robia G Pautler** – Manganese-Enhanced MRI, axonal transport, Alzheimer's disease, Neurophysiology, Biomedical Imaging
- **Susan Rosenberg** – Genome instability, stress resistance and resilience, stress-induced mutagenesis, spontaneous dna damage, cancer evolution
- **Joshua Shulman** – Drosophila Models, neurodegeneration, brain aging, functional genomics
- **Zheng Sun** – Circadian clock, exercise, energy metabolism, hormesis and resilience, epigenomic regulation

Baylor College of Medicine

Advanced Technologies and Core Facilities

BCM Advanced Technology Cores

- Provides state-of-the-art technology and instrumentation through 28 core labs
- https://www.bcm.edu/research/atc-core-labs

Knockout Mouse Phenotyping Program (KOMP2)

- BCM is one of the three sites in the US, collaborating with International Mouse Phenotyping Consortium (IMPC) to knockout and characterize all protein-coding genes in the mouse genome.
- Aging and age-related phenotypes are one of the pipelines at BCM-KOMP2.
- https://www.bcm.edu/departments/molecular-and-human-genetics/research/knockout-mouse-project