Cognitive science is a new multidisciplinary field, built around modern computational and neuroscience capabilities. UC Irvine provides the perfect modern environment for research training, as the youngest member of 61 premier research institutions in the Association of American Universities, and the best U.S. university under fifty years old according to the Times Higher Education rankings.

Focus areas at the Department of Cognitive Sciences include cognitive neuroscience, computational and mathematical cognitive modeling, development, language, perception, sensation and action. Many of the research units described here are now looking for graduate students to join in one of their projects.

CoLaLab investigates the complex system we call human language, focusing on information acquisition and extraction.

Synlab explores the cognitive neuroscience of syntactic structure building in human language using techniques such as acceptability judgments, reaction times, and EEG.

The Cognitive Psychometrics Lab studies mathematical models of learning and memory, mathematical psychology and measurement.

The Judgment and Decision-making Laboratory investigates the cognitive processes involved in human judgment and decision-making through formal modeling.

The Cognition and Individual Differences Lab focuses on the integration of cognitive models with modern statistical methods for individual differences.

The Hoffman Lab uses mathematics and computer simulations to study perceptual evolution, and asks questions such as “Does natural selection favor true perceptions?”

MADLAB applies mathematical and computational approaches to cognition and collective intelligence in decision-making, categorization, problem solving and memory.

The Memory Attention Perception Lab studies human information processing and its interaction with perception using behavioral testing and computational modeling.
The **Lab of Visual Neuroscience** studies human visual and multi-sensory neuroscience using behavioral, genetic, and neuroimaging techniques.

The **Human Neuroscience Lab** studies the integrative function of the brain in cognition, combining EEG, MEG, TMS, and fMRI studies with models of the neural mechanisms.

The **Auditory and Language Neuroscience Lab** studies the neural and computational basis of auditory perception, speech, and language processing.

The **Cognitive Anteater Robotics Laboratory** tests computational models of the nervous system on robots and on parallel computing platforms.

The **Human Information Processing Lab** does projects in vision, attention, and short-term memory using psychophysics, brain imaging, and mathematical modeling.

Sarnecka Lab conducts behavioral studies of conceptual and language development in young children, especially in numerical cognition.

The **Cognitive NeuroSystems Lab** investigates vision, hearing, search and navigation in 4D virtual environments, and EEG studies of speech and attention.

The **Visual Perception and Neuroimaging Lab** studies the perceptual and neural heuristics our visual systems use to construct the unified world that we experience.

The **Auditory Perception & Neuroimaging Lab** uses psychophysical and brain imaging methods to study the perception of speech, music, and other complex sounds.

The **Hearing Lab** focuses on the perception of complex sounds using psychophysical methods and computational models.

Berg’s lab focuses on psychophysical investigations of auditory attention, filtering properties of the auditory system, and computational models of hearing.

The **Chubb-Wright Lab** focuses on studies at the intersection of attention, perception and movement.


The application deadline is December 15!