

Language and Communicative Disorders

OFFICE: Cognitive Science Building 261,
Mail code: 0526
(619) 594-6775
<http://www.crl.ucsd.edu>

Professors

Elizabeth Bates, Ph.D., *Cognitive Science, Psychology*
Ursula Bellugi, Ed.D., *Adjunct/Psychology*
Jeff Elman, Ph.D., *Cognitive Science*
Mark Kitchesky, M.D., *Clinical Neurosciences*
Marta Kutas, Ph.D., *Cognitive Science*
Carol Padden, Ph.D., *Communications*
David Swinney, Ph.D., *Psychology*

Associate Professors

Farrell Ackerman, Ph.D., *Linguistics*
John Moore, Ph.D., *Linguistics*

Assistant Professors

Victor Ferreira, Ph.D., *Psychology*
Javier Movellan, Ph.D., *Cognitive Science*

The Joint Doctoral Program

San Diego State University (SDSU) and the University of California, San Diego (UCSD), offer jointly a doctoral program in Language and Communicative Disorders. The program's focus is the interdisciplinary study of language and communicative disorders. A major emphasis of the program is to apply techniques developed in cognitive science and neuroscience to the study of language and language disorders. The program involves study and research in normal language (including sign languages of the deaf and language impairments), and in the neural bases of language use and language loss. Participating faculty have research interests in a wide range of issues in processes of language development, language and aging, multilingualism, language disorders, assessment, and intervention. Graduates of the program will be qualified to serve as faculty in university programs in a variety of disciplines, and to provide leadership in research and health services. The doctoral program faculty at UCSD are an interdisciplinary group from the Departments of

Cognitive Science, Communication, Linguistics, Neurosciences, and Psychology. The doctoral program faculty at SDSU are members of the Departments of Communicative Disorders, Linguistics, and Psychology. The program is coordinated by the doctoral program coordinators at each campus, in conjunction with an Executive Committee comprising three faculty from each campus appointed by the Graduate Deans from each campus.

The program is innovative in that many of the requirements are designed to function as a model of professional preparation specifically incorporating activities in which a successful teacher and researcher must engage after obtaining the Ph.D.: students will be required to participate in interdisciplinary research throughout the program, learn about the nature and ethics of research, prepare grant proposals, write manuscripts, and will gain experience in oral presentations and teaching. Graduates from the program will be well prepared for the rigors of an academic/research career. The doctoral program in Language and Communicative Disorders, being interdisciplinary, draws from a variety of undergraduate disciplines including communicative disorders, psychology, cognitive science, linguistics, engineering, and other related sciences. Students should have adequate preparation in mathematics, statistics, and biological sciences. Backgrounds in neurosciences and/or language sciences, or language disorders is helpful, but not required for admission.

By the end of the first year, all students will select a major field of emphasis by choosing one of three concentrations. The *Adult Language* concentration is intended to provide intensive education in communicative disorders in adults. Students in this concentration will also develop expertise in the study of language processing in normal adults. The *Child Language* concentration is intended to provide specialized education in childhood (birth to adolescence) communicative disorders. Students in this concentration will also achieve competence in developmental psycholinguistics emphasizing language acquisition in normally developing children. The *Multilingualism* concentration is intended to provide education in cross-linguistic, ethnographic, and other comparative studies of communicative disorders in children and/or adults, including those associated with bilingualism and second-language acquisition (including acquisition of sign language in deaf individuals). All students will be required to take

some courses in each of the three concentrations. In addition, each student will elect a *methods minor*, applying one of the new technologies of cognitive neuroscience to research on language and communicative disorders. These may include computer-controlled studies of language processing in real-time functional brain imaging (including event-related brain potentials and/or functional magnetic resonance imaging), or neural-network simulations of communicative disorders.

The program is designed as a five-year curriculum, based on a twelve-month academic year. Students will be admitted to the doctoral program only in the fall semester/quarter. Information regarding admission is found in the current edition of the *Bulletin of the Graduate Division* of San Diego State University. To receive an application for admission, contact: SDSU/UCSD Joint Doctoral Program in Language and Communicative Disorders, San Diego State University, 5500 Campanile Drive, San Diego, California 92182-1518, (619) 594-6775.

Required courses include the *Tools* requirement (two courses in statistics/research design, a course in neuroanatomy and physiology, a course in language structure and theory and a professional survival skills course), the *Foundations* requirement (three courses on normal language and three courses on disorders of language) and the *Electives* requirement (at least five courses, with a minimum of three courses related to the chosen concentration, chosen from a broad list of approved options from Anthropology, Cognitive Science, Communicative Disorders, Computer Science, Linguistics, Neurosciences, and Psychology). Consult with adviser for approved list of elective courses. The five required electives must be approved by the student's adviser and the Doctoral Program Coordinators. In addition to their course requirements, students are required to complete three laboratory rotations in different research methodologies (each lasting a minimum of one quarter), two research projects (first year and second year), a qualifying examination for advancement to candidacy, and a dissertation proposal in the form of grant proposal to one of the public agencies that funds research in communicative disorders.

Ph.D. Time Limit Policies

Students must be advanced to candidacy by the end of four years. Total university support can-

not exceed seven years. Total registered time at UCSD cannot exceed eight years.

COURSES

(See individual departments for details; for courses available at SDSU, see *SDSU Graduate Catalogue*.)

Tools Requirement:

Quantitative Methods
Psychology 201A-B

Ethics and Survival Skills in Academia
Cognitive Science 241

Neuroanatomy and Neurophysiology
Cognitive Science 201 or Clinical
Neuroanatomy (Neurosciences 253)

Language: Basic Structures and Concepts
Cognitive Science 203 or
(Linguistics 221A and 211A)

Foundations Requirement:

Normal Language and Cognition in Adults
Psychology 244

Aphasia
Cognitive Science 251 or Psychology 245

Development of Normal Language and
Cognition in Children
Psychology 215 or Cognitive Science 256

Electives:

Cognitive Science
202: Foundations: Computational Modeling of
Cognition
211A-C: Research Methods in Cognitive Science
213: Issues in Cognitive Development
238: Topics in Cognitive Linguistics
260: Seminar on Special Topics
272: Topics in Theoretical Neurobiology
273: Biological Basis of Attention

Communication
200A: Communication as Social Force
200B: Communication and Culture
200C: Communication and the Individual
201B: Ethnographic Methods for
Communication Research
201C: Discourse Analysis
222: Childhood and Culture

Linguistics
211A: Introductory Phonology
214: Topics in Phonetics
221A: Introduction to Grammatical Theory

225: Topics in Syntax
249: Topics in Sign Languages of the Deaf
272: Topics in Neurolinguistics

Psychology

218AB: Cognitive Psychology
222: Biological Psychology
227: Cognitive Development
230: Brain, Cognition & Development
235: Cognitive Psychophysiology
236: Substance Abuse
242A-B-C: Research Topics in Developmental
Psychology
244: Special Topics in Psycholinguistics
252: Seminar on Cognitive Neuroscience
254: Functional Brain Imaging
264A-C: Advanced Topics in Language
Processes
266: Advanced Topics in Psycholinguistics

Computer Science and Engineering

250AB: Artificial Intelligence
251: Natural Language Processing
253: Neural Networks
256: Statistical Natural Language Processing
258A: Connectionist Natural Language
Processing

Neurosciences:

243: Physiological Basis of Human Information
263: Developmental Neurobiology
264: Behavioral Neuroscience
274: Neurobiology of Cognitive Developmental
Disorders

Philosophy:

235: Philosophy of Language

Students who use this course to fulfill the Tools
requirement may not use this as an elective.