THE PROGRAM

The cooperating faculties of San Diego State University (SDSU) and the University of California, San Diego (UCSD) offer a joint 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 on typical and atypical language acquisition and development, sign languages, bilingualism and the neural bases of language use and language loss.

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 program is designed as a five-year curriculum, based on a twelve-month academic year. It is possible to obtain academic preparation for the ASHA CCC or complete a CFY concurrently with doctoral studies. However, access to clinical training is not automatic nor is it guaranteed.

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.

In the SDSU/UCSD program, students will receive education in areas that are relatively new to the field of communication sciences and disorders, including some important emerging technologies of cognitive science (e.g., simulations of language learning and language breakdown in neural networks; computer-controlled techniques for the study of real-time language processing in children and adults) and neuroscience (e.g., in vivo imaging of normal and abnormal language processing through the use of event-related brain potentials and functional magnetic resonance imaging). This shift toward a cognitive neuroscience approach will also require basic coursework in linguistics, psycholinguistics, developmental psychology, neuroanatomy and neurophysiology, and computational science, complemented by courses devoted to communicative disorders in children and adults. The program encourages applicants from a range of different backgrounds (including linguistics, computer science, biology, psychology, and communicative disorders). Students will be asked to concentrate in at least one of three tracks: child language (normal and abnormal), adult language (normal and abnormal), and/or multilingualism (including bilingualism in oral and signed languages, and cross-linguistic studies of language disorders). Within their chosen concentration, students will be exposed to a range of technologies, including experimental methods in the study of behavior, electrophysiology and functional brain imaging, and computational modeling.

CONTENTS

THE PROGRAM ................................................................. 1
THE UNIVERSITIES .......................................................... 2
SPECIALIZATIONS .......................................................... 3
PROGRAM FEATURES ....................................................... 4
FACULTY ............................................................................. 5
FINANCES ........................................................................... 6
ADMISSION INFORMATION ................................................ 7
NOTES AND CHECKLIST .................................................... 8

ACKNOWLEDGMENTS

Malcolm Love Library (SDSU)       Gesel Library (UCSD)
Photos by:  Jim Brady             Photos by:  David Westphal
THE UNIVERSITIES

Our program combines the faculties, facilities/laboratories, and resources of the School of Speech, Language, and Hearing Sciences, Linguistics, and Psychology at SDSU; and Cognitive Science, Communications, Linguistics, Neurosciences, and Psychology at UCSD. This combination offers students the unique strengths of both institutions.

San Diego State University (SDSU)

San Diego State University, with over 34,000 students, is the oldest and largest university in the San Diego region and one of the largest in California. Sixty percent of the thousands of yearly SDSU graduates choose to stay in San Diego to pursue their careers, making SDSU a primary educator of the region's workforce. SDSU is classified by the Carnegie Foundation as "Doctoral/Research University-Intensive." Peers in this group include George Washington University, Syracuse University, Texas Tech University and the University of Oregon. The university is proactive in forming partnerships with business and industry, as well as with the state and federal governments.

For four consecutive years, SDSU has been ranked the No. 1 most productive research university, among schools with 14 or fewer Ph.D. programs based on the Faculty Scholarly Productivity Index — Academic Analytics, 2010. SDSU's joint doctoral program in language and communicative disorders (with UCSD) placed fourth on the Faculty Scholarly Productivity Index rankings compiled by Academic Analytics and released by The Chronicle of Higher Education in 2007. The National Research Council ranked our joint doctoral program among the top ten in the nation in their most recent ranking (2010). The majority of the graduates of the doctoral program hold faculty positions in universities or research scientist positions in labs here in the US and abroad.

University of California, San Diego (UCSD)

UCSD, one of 10 University of California campuses, has been singled out for top rankings in national surveys for both its graduate and undergraduate programs. The Education Editor of The New York Times listed it among the nation's top-ranking institutions. In "academics, quality of life, and social life," UCSD ranked in the top 7 nationally. It currently ranks fifth in the nation in the amount of federal grant money received.

Since its beginning, UCSD has encouraged interdisciplinary research and education in innovative degree programs that cut across departmental boundaries (e.g. inter-departmental PhD programs in Neuroscience and in Cognitive Science). UCSD has also become a center for comparative psycholinguistics, including cross-linguistic studies of language acquisition and real-time sentence processing in normal adult speakers of more than a dozen different languages.
SPECIALIZATIONS

Concentrations

By the end of the first year, all students will have selected a major field of emphasis by choosing one of three concentrations: Adult Language, Child Language, or Multilingualism. All students are required to take some courses in each of the three concentrations:

The Adult Language concentration is intended to provide intensive education in communicative disorders in adults. Students in this concentration 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 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).

Methods Minor

All students are required to develop basic expertise in experimental design and statistics, and to become familiar with standard techniques for behavioral assessment, e.g., intelligence testing, standardized tests of language ability, analyses of free speech, design and implementation of experimental measures of language and other related cognitive behaviors. In addition, by the end of the third year all students declare a Methods Minor from one of three options:

The Behavioral Dynamics minor is intended for students who want to specialize in computer-controlled methods for the study of language and cognitive processing in real-time.

The Neural Imaging minor is intended for students who are interested in the simulation of normal and abnormal language and cognition in artificial neural networks.

The Neural Modeling minor is intended for students who want to complement behavioral studies with neuroanatomical and neurophysiological techniques, including event-related brain potentials and functional magnetic resonance imaging.

Course Requirements

The program for each student includes a common core of courses designed to provide the basic tools for research and a foundation of knowledge in the important issues in language and communicative disorders, together with specific electives appropriate to the student’s chosen concentration and methods minor:

The Tools requirement consists of 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 consists of two courses on normal language and three courses on disorders of language.

The Electives requirement consists of at four courses, with a minimum of three courses related to the chosen concentration. These electives must be chosen from a broad list of approved options from Anthropology, Cognitive Science, Speech, Language, and Hearing Sciences, Computer Science, Linguistics, Neurosciences, and Psychology.
Laboratory Rotations and Projects

In order to obtain experience in current, state-of-the-art research methodologies, each student completes two laboratory rotations. All students are required to complete two research projects during their first two years of the program (first- and second-year projects). These projects are usually connected with the laboratory rotations. These projects involve experiment design, data collection, analyses, preparation of a potentially publishable manuscript, and an oral presentation of the research findings at the annual Fall Colloquium. Students are encouraged to submit their projects for presentation at professional meetings and to submit them to an appropriate journal.

Teaching

The teaching requirement may be satisfied under one of two options. Model 1 requires that the doctoral student teach a full course and submit the course syllabus to the Executive Committee for review at the end of the semester/quarter. Model 2 requires that the doctoral student serve as a teaching associate for two courses.

Qualifying Examination

After successful completion of all requirements, the student is eligible to take the qualifying examination. At this point, the student selects the individuals who will serve as his/her doctoral committee and whose responsibility it is to guide the doctoral student's preparation for the qualifying examination.

The qualifying examination consists of (1) a written component, which is to be in the form of a scholarly review of one or more issues related to the student’s chosen area of research, and (2) an oral component, which is a public presentation of the paper. Students are encouraged to write their integrative paper in a format and of sufficient quality for submission to an appropriate journal.

Dissertation Proposal

The dissertation proposal takes the form of an NIH or NSF grant proposal. For Model 1 dissertation, the proposal is based on completed research that becomes pilot studies for the grant proposal. The student may be encouraged to submit the grant proposal to support their future research, e.g., post-doctoral studies, or a First Investigator Award. For Model 2 dissertation, the proposal becomes the basis for the dissertation research to be completed. The dissertation proposal must be approved by the student's Dissertation Committee. Advancement requires passing the qualifying exam and successfully defending the dissertation proposal by the end of the fourth year.

Dissertation

After advancement to candidacy, the remaining requirement will be the satisfactory completion of a dissertation. The dissertation may take one of the following two forms.

MODEL 1: Students who have maintained continuity through their second-year project, qualifying examination, and dissertation proposal, and who have successfully generated publishable research that has been submitted to peer-reviewed journals, may use a minimum of three such interconnected manuscripts as their dissertation. The dissertation will contain an introduction and review of the literature that conceptually link the submitted studies, the studies themselves (exactly as they have been prepared for publication), and a conclusion which that pulls the results together in a broader theoretical framework.

MODEL 2: Students may choose to carry out a more traditional dissertation involving the appropriate written presentation of original research carried out by the student under the guidance of the student’s dissertation committee chair.
The doctoral program faculty at SDSU are members of the School of Speech, Language, and Hearing Sciences, Department of Linguistics, and Department of Psychology. The doctoral program faculty at UCSD is also an interdisciplinary group from the Department of Cognitive Science, Department of Communications, Department of Linguistics, Department of Neurosciences, and Department of Psychology. The program is coordinated by the Doctoral Program Co-Directors at each campus, in conjunction with an Executive Committee comprised of three faculty from each campus appointed by the Graduate Deans from each campus. Joint Doctoral Program Co-Directors are: Tracy Love (SDSU); Rachel Mayberry (UCSD).

**SDSU Doctoral Program Faculty**

**Jessica Barlow, Ph.D.**
Speech, Language, and Hearing Sciences
Phonological theory. Also, speech perception and production in various populations including second-language learners and children with speech disorders.

**Henrike Blumenfeld, Ph.D.**
Speech, Language, and Hearing Sciences
Influence of bilingualism on language and cognition across the lifespan; bilingual aphasia. Behavioral and eye-tracking methodologies.

**Soonja Choi, Ph.D.**
Linguistics
Cross-linguistic comparisons of language development, relations between language and cognition in early development of grammar.

**Karen Emmorey, Ph.D.**
Speech, Language, and Hearing Sciences
Research interests include the study of signed languages and how it provides a window into the nature of human language, into the relation between language and spatial cognition, and into the determinants of brain organization for language.

**Margaret Friend, Ph.D.**
Psychology
Developmental psychology, processes of language comprehension and the developmental relation between language and emotion in communication.

**Philip Holcomb, Ph.D.**
Psychology
The brain basis of human cognition, primarily language comprehension and production, using electrophysiological measures.

**Tracy Love, Ph.D.**
Speech, Language, and Hearing Sciences
Language processing in both language impaired and language unimpaired child and adult populations. Focuses on examining the nature of the information used during on-going language and cognitive processing.

**Ralph-Axel Mueller, Ph.D.**
Psychology
Brain Development Imaging investigates the plasticity of the brain organization for language in healthy children, children and adults with focal brain lesion, and in patients with autistic disorders.

**Marilyn Newhoff, Ph.D.**
Speech, Language, and Hearing Sciences
Research interests include language, cognition and attention in typical and atypical language systems. Focus is on behavioral and brain imaging techniques.

**Ignatius Nip, Ph.D.**
Speech, Language, and Hearing Sciences
Speech motor development in typically-developing children and children with motor speech disorders. Relations between speech motor, language, and cognitive skills.

**Sonja Pruitt, Ph.D.**
Speech, Language and Hearing Sciences
Child language development in disorders, in particular, language development in the context of linguistic diversity and poverty, detailing the morphosyntactic abilities of children diagnosed with language impairments, and examining the efficacy of prevention models for “at-risk” populations.

**Judy Reilly, Ph.D.**
Psychology
Interface of linguistic and affective facial expression in normal deaf infants acquiring sign language as their first language, expression of affect in communicatively disordered populations.

**Lewis Shapiro, Ph.D.**
Speech, Language, and Hearing Sciences
On-line lexical, syntactic and cognitive processing in normal and neurologically-impaired populations. The study of brain-language relations. Neuroimaging and neurophysiology. The application of linguistic theory to treatment of language deficits.
### FACULTY

#### UCSD Doctoral Program Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Field</th>
<th>Research Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farrell Ackerman, Ph.D.</td>
<td>Linguistics</td>
<td>Research interests center on interface between morphology and syntax. Viewed from a lexicalist perspective, whereby information associated with lexical representations is a central ingredient in grammatical explanation.</td>
</tr>
<tr>
<td>Ursula Bellugi, Ed.D.</td>
<td>Cognitive Neuroscience-Salk Institute</td>
<td>(1) Research on American Sign Language (the nature of ASL, its acquisition by children, processing in normal adults, organization in the brain); (2) Research linking cognition, brain and molecular genetics in genetic syndromes such as Williams Syndrome and Down Syndrome.</td>
</tr>
<tr>
<td>Leslie Carver, Ph.D.</td>
<td>Psychology</td>
<td>Research on the brain basis of cognitive and social cognitive development using behavioral and electrophysiological (ERP) measures.</td>
</tr>
<tr>
<td>Seana Coulson, Ph.D.</td>
<td>Cognitive Science</td>
<td>Research addresses the cognitive and neural basis of meaning construction using linguistic, behavioral, and electrophysiological (ERP) techniques. Interests include embodied metaphor theory and the comprehension of jokes, sarcasm, and iconic gestures.</td>
</tr>
<tr>
<td>Gedeon Deák, Ph.D.</td>
<td>Cognitive Science</td>
<td>Research interests include cognitive and language development in preschool children including, for example, children's ability to name or categorize an entity differently across situations, or to shift responses across changing problem. Also, how preschoolers learn the meanings of related words. A third line is infant communication, specifically the emergence and development of episodes of shared attention between infants and caregivers.</td>
</tr>
<tr>
<td>Jeff Elman, PhD.</td>
<td>Cognitive Science</td>
<td>Center for Research in Language. Research on neural network models of natural language.</td>
</tr>
<tr>
<td>Victor Ferreira, Ph.D.</td>
<td>Psychology</td>
<td>Research interests include investigations of the mechanisms of language production, computational and quantitative modeling of cognitive processes, and development of methodological tools for investigation of cognitive and perceptual processes.</td>
</tr>
<tr>
<td>Tamar Gollan, Ph.D.</td>
<td>Psychiatry</td>
<td>Using bilingualism as an experimental tool for revealing the cognitive and neural mechanisms underlying proficient language processing. Studies designed to reveal the joint consequences of bilingualism, aging, and Alzheimer's disease for language production, language comprehension, and cognitive control.</td>
</tr>
<tr>
<td>Eric Halgren, Ph.D.</td>
<td>Neurosciences</td>
<td>Research into the neural mechanisms of language and other cognitive processes, using magnetoencephalography, intracranial recordings in humans, and other techniques.</td>
</tr>
<tr>
<td>Mark Kritchevsky, M.D.</td>
<td>Neurosciences</td>
<td>Behavioral neurologist and neurologic educator. Sees patients with deficits of higher brain functions and with problems in the overlap between neurology and psychiatry. Teaches Basic Neurology course in the Spring quarter. Also teaches each year a clinical neurology tutorial and courses in behavioral neurology and general clinical neurology.</td>
</tr>
<tr>
<td>Marta Kutas, Ph.D.</td>
<td>Cognitive Science</td>
<td>Research on the neural basis of human information processing; studies of language comprehension and semantic memory using event-related potentials (ERPs).</td>
</tr>
<tr>
<td>John Moore, Ph.D.</td>
<td>Linguistics</td>
<td>First- and second-language acquisition in children and adults with an emphasis on age of acquisition effects on psycho- and neurolinguistic processing. Psycholinguistics of sign language, speech-gesture, and reading development in deaf and hearing populations.</td>
</tr>
<tr>
<td>Carol Padden, Ph.D.</td>
<td>Communications</td>
<td>Research on American Sign Language, development of ASL, development of English literacy skills in deaf children.</td>
</tr>
<tr>
<td>Keith Rayner, Ph.D.</td>
<td>Psychology</td>
<td>Research on a wide variety of cognitive processes, ranging from language comprehension, language production and scene perception to visual search and eye movement control using various eye-tracking apparatus.</td>
</tr>
<tr>
<td>Jeanne Townsend, Ph.D.</td>
<td>Neurosciences</td>
<td>The focus of research is the identification of brain structural and functional correlates of cognitive function, particularly the bases of attentional processes, and developmental changes in these relationships. Employ a variety of methods and techniques including neuropsychological and behavioral testing, neurophysiological recordings (EEG, ERP), structural and functional MR imaging.</td>
</tr>
<tr>
<td>Doris Trauner, M.D.</td>
<td>Neurosciences</td>
<td>Cognitive development in children with early focal brain damage, genetic and metabolic disorders; plasticity in the developing human nervous system.</td>
</tr>
</tbody>
</table>

### FINANCES

Although funding for graduate students cannot be guaranteed, every effort will be made to provide students with support through training grants, research assistantships, and/or teaching assistantships, with students serving as research or teaching assistants as a means of earning their stipends. Students are strongly discouraged from holding other jobs, except in special circumstances and with prior approval of the directors. Registration fees and/or tuition waivers may be available, subject to budget restrictions and satisfactory progress of the student; however such funding is not available beyond the fifth year in the program. Graduate student loans are available to students who are US citizens through the SDSU Financial Aid Office. Graduate grants, fellowships, and scholarships are also available through such sources as NSF, ASHA, APS and others. Minority students often have special funding sources available to them, which they are encouraged to investigate through the Financial Aid Office. To obtain information pertaining to financial aid, contact the Financial Aid Office at San Diego State University. Both universities offer institution-owned student housing on a first-come basis, usually below the price of comparable housing in the area.
ADMISSION INFORMATION

The SDSU/UCSD joint doctoral program in Language and Communicative Disorders, being interdisciplinary, draws from a variety of disciplines including communicative sciences and disorders, psychology, cognitive science, linguistics, engineering, or other related sciences. Students should have adequate preparation in mathematics, statistics and biological sciences. A background in neurosciences and/or language sciences, or language disorders is helpful, but not required for admission.

Students are admitted only in the Fall. Application period opens October 1. Deadline for receipt (not postmark) of all application materials is January 12. Deadline for receipt (not postmark) of GRE and TOEFL (if applicable) scores is February 1. Admission decisions are made in March; email notifications of admission decisions are sent by April 1.

1. Students must meet the general admission requirements for both universities. Generally, these include: (a) a baccalaureate degree from an accredited college or university; (b) a GPA of at least 3.25 (4.0 scale) in the last 60 semester (or 90 quarter) credits of upper-division and/or graduate courses; (c) good standing in the last institution attended; (d) suitable scores in the quantitative and verbal sections of the Graduate Record Examination, general test; and (e) submission of appropriate application forms and supporting materials as outlined below.

2. The policy of the program concerning students with advanced degrees (MA, MS) is that they enter the program at the same level as all other students. Any student has the right to attempt to waive a specific class requirement. Such waivers must have the consent of the instructor and approval of the Program Directors.

3. Students applying to the Joint Doctoral Program must be admitted by both SDSU and UCSD. If admitted to the program, UCSD will send additional materials to be completed. Payment of a UCSD application fee will be required at that time.

Read the instructions carefully and adhere to the deadlines below in order to ensure that your application is considered. Departmental deadlines govern.

Due January 12  This deadline differs from and is earlier than the posted SDSU deadline for application submission.

To be admitted to the Joint Doctoral Program, applicants must first submit by January 20 the online Cal-State University (CSU) application, followed by submission of the online PhD application.

Applicants must submit directly to the program in a single envelope the following items:

- Printed copy of online PhD Application
- Statement of Purpose
- Three letters of recommendation in sealed envelopes
- One set of official or unofficial transcripts from each college or university attended (International students: include copy of evaluation report, if available.)
- Photocopy of the GRE scores received by you from the Educational Testing Service
- Publication reprints or presentation abstracts, if available
- Photocopy of TOEFL scores (if applicable).

Mail Items listed above to: SDSU/UCSD Joint Doctoral Program in Language and Communicative Disorders
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-1518

Due February 1 to Graduate Admissions  This deadline differs from and is earlier than the posted SDSU deadline for file completion.

- One official transcript from each college or university attended
- Official GRE scores (sent electronically from testing agency)
- TOEFL scores (paper, computer-based (CBT) version, or internet-based (IBT) version), if applicable (sent electronically from testing agency)

Mail official transcripts to: Graduate Admissions
Enrollment Services
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-7416
NOTES TO ASSIST YOU IN THE APPLICATION PROCESS

1. Begin the application process as early as possible.
2. Take the GRE as early as possible. If you elect to take it as late as December you risk having an incomplete file. Incomplete files are not reviewed.
3. GRE: When you register to take the GRE, there is space to indicate the Institution and Department Codes. Submit your GRE scores to SDSU:

   SDSU: Institution Code is 4682
   (Departmental codes no longer required)

4. Use the “Checklist” to aid in preparing your application.
5. Letters of recommendation and accompanying recommendation form must be signed by the recommender across the envelope seal and unopened to be official.
6. You must submit to SDSU official transcripts of all colleges and universities attended even if you were enrolled for only one quarter/semester. If admitted to the program, final transcript showing degree awarded must be sent to both SDSU and UCSD.
7. International Documents: If you have international coursework, you must have your school send SDSU Graduate Admissions one official original-language copy of all records of academic coursework and proof of degree. For each document you must also send a certified literal English translation, which can come directly from the school itself or from a professional, certified translator. The translation must contain all information shown on the original-language documents. Country-specific guidelines can be found on the SDSU Graduate Admissions website: http://arweb.sdsu.edu/es/admissions/grad/country.html.

Monitor receipt of your application materials via the SDSU Web Portal using your permanent SDSU Red ID number, mailed to you 7-14 days following submission of the CSU Mentor application. If you have questions about the application process, send an e-mail to ipark@mail.sdsu.edu or tracy.love@sdsu.edu.

APPLICATION CHECKLIST

1. _____ Submit CSU online application
2. _____ Submit PhD online application
3. _____ Printed copy of PhD online application
4. _____ Statement of Purpose
5. _____ Three letters of recommendation (forms and letters)
6. _____ One set of official or unofficial transcripts from each college or university attended
7. _____ Copy of GRE (and TOEFL) score
8. _____ Publication reprints or presentation abstracts, if available

Mail items 3 to 8 in a single envelope to:

SDSU/UCSD Joint Doctoral Program in Language and Communicative Disorders
San Diego State University
5500 Campanile Drive
San Diego, California 92182–1518

9. _____ One set of official transcripts from each college or university attended
10. _____ **Official GRE scores
11. _____ **TOEFL (paper, computer-based, internet-based), if applicable

**GRE and TOEFL scores should be sent electronically from testing agency (see Institution Codes for SDSU and UCSD). If necessary, official scores may be mailed.