

## David Paul Corina Ph.D.

### a. Professional Preparation

New York University	Educational Psychology	B.S. 1982
Gallaudet University	Linguistic	M.A. 1983
University of California, San Diego	Psychology and Cognitive Science	Ph.D. 1991
University of Southern California	Psycholinguistics	Post-Doctoral Fellow . 1991-93

### b. Appointments

2005-present	Full professor, Center for Mind and Brain, University of California, Davis Departments of Linguistics and Psychology
1999-2005	Associate professor, University of Washington, Seattle, WA, Department of Psychology
1993-1999	Assistant professor, University of Washington, Seattle, WA, Department of Psychology
1991-1993	Post-doctoral fellow, Program in Neural Informational and Behavioral Sciences, University of Southern California, Los Angeles, CA
1990-1991	Research Associate, Laboratory for Language and Cognitive Studies, The Salk Institute, La Jolla, CA
1984-1990	Graduate Research Assistant. Laboratory for Language and Cognitive Studies, The Salk Institute, La Jolla, CA

### c. Grant Support (2013-2017)

R01DC014767:NIH/NIDCD, Corina (PI) 07/01/2015-06/30/2020, Determinants of Cross Modal Plasticity in Children with Cochlear Implants, \$250,000/yr.

R01 DC011538: NIH-NIDCD, Belligi, Corina, Hickok (Multi-PI) 7/1/2016-12/31/2016, Neural Basis of Gestural Communication: Evidence from Sign Language. \$104,055

Mike and Rene Childs Family Fund, Corina (PI) 10/1/2014-9/30/2015 Corina (PI), Determinants of Cross Modal Plasticity in Deaf Children with Cochlear Implants. \$10,000

R21 DC012505: NIH-NIDCD, Fernald (PI) Corina (Co-PI) 03/01/2012-03/31/2015, The early development of communication and language. \$41,289/yr.

SBE-0541953/SBE-1041725: NSF, Corina (PI) 09/15/2013-05/31/2014  
Science of Learning Center, Gallaudet University SCL on Visual Language and Visual Learning. \$112,000/yr

#### **d. Publications.**

- Corina DP (1989). Recognition of affective and noncanonical linguistic facial expressions in hearing and deaf subjects. *Brain Cogn* 9:227-237.
- Corina DP, Sagey E (1989). Are Phonological Hierarchies Universal?: Evidence from American Sign Language. In: ESCOL 6. Ohio State University Press, Columbus, OH, pp 73-83.
- Vaid J, Corina D (1989). Visual field asymmetries in numerical size comparisons of digits, words, and signs. *Brain Lang* 36:117-126.
- Bellugi U, O'Grady L, Lillo-Martin D, O'Grady M, van Hoek K, Corina D (1990). Enhancement of spatial cognition in deaf children. In: From gesture to language in hearing and deaf children Volterra V, Erting C (Eds). Springer-Verlag, Berlin ; New York, pp 278-298.
- Corina DP (1990). Handshape Assimilations in Hierarchical Phonological Representations. In: Sign Language Research : Theoretical Issues. Lucas C (Ed). Gallaudet University Press, Washington, D.C., pp 27-49.
- Corina DP (1990). Reassessing the Role of Sonority in Syllable Structure: Evidence from Visual Gestural Language. In: Chicago Linguistic Society 26th Annual Regional Meeting/Parasession on the Syllable in Phonetics and Phonology. University of Chicago Press, Chicago, IL, pp 33-44.
- Emmorey K, Corina D (1990). Lexical recognition in sign language: effects of phonetic structure and morphology. *Percept Mot Skills* 71:1227-1252.
- Bellugi U, Bihrlé AM, Corina DP (1991). Linguistic and Spatial Development: Dissociations Between Cognitive Domains. In: Biological and Behavioral Determinants of Language Determinants of Language Development. Krasnegor N, Rumbaugh D, Studdert-Kennedy M (Eds). Erlbaum, Hillsdale, NJ, pp 363-393.
- Corina DP (1992). Syllable Priming and Lexical Representations: Evidence from Experiments and Simulations. In: 14th Annual Conference of the Cognitive Science Society. Erlbaum, Hillsdale, NJ, pp
- Corina DP, Poizner H, Bellugi U, Feinberg T, Dowd D, O'Grady-Batch L (1992). Dissociation between linguistic and nonlinguistic gestural systems: a case for compositionality. *Brain Lang* 43:414-447.
- Corina DP, Vaid J, Bellugi U (1992). The linguistic basis of left hemisphere specialization. *Science* 255:1258-1260.
- Corina D, Sandler W (1993). On the nature of phonological structure in sign language. *Phonology* 10:165-207.
- Corina DP (1993). To Branch or Not To Branch: Underspecification in ASL Handshape Contours. In: Phonetics and Phonology Current Issues in ASL Phonology. Coulter G (Ed). Academic Press, San Diego, pp 63-94.

- Emmorey K, Corina D (1993). Hemispheric specialization for ASL signs and English words: differences between imageable and abstract forms. *Neuropsychologia* 31:645-653.
- Haglund MM, Ojemann GA, Lettich E, Bellugi U, Corina D (1993). Dissociation of cortical and single unit activity in spoken and signed languages. *Brain Lang* 44:19-27.
- Corina DP (1994). The Induction of Prosodic Constraints: Implications for Phonological Theory and Mental Representations. In: *The Reality of Linguistic Rules*. Corrigan R, Iverson G, Lima S (Eds). John Benjamin, Philadelphia, PA, pp 115-145.
- Corina DP, Vaid J (1994). Lateralization for shadowing words versus signs: A study of ASL-English interpreters. In: *Bridging the gap: Empirical research in simultaneous interpretation*. Lambert S, Moser-Mercer B (Eds). Benjamins, Amsterdam, Philadelphia, pp 237-248.
- Emmorey K, Corina DP, Bellugi U (1995). Differential Processing of Topographic and Referential Functions of Space. In: *Language, gesture, and space*. Emmorey K, Reilly JS (Eds). Lawrence Erlbaum Associates, Hillsdale, N.J., pp 43-62.
- Corina D, Kritchevsky M, Bellugi U (1996). Visual Language Processing and Unilateral Neglect: Evidence from American Sign Language. *Cognitive Neuropsychology* 13:321-356.
- Corina DP (1996). ASL syllables and prosodic constraints. *Lingua* 98:73-103.
- Corina DP (1996). Sign language and the brain: Apes, apraxia, and aphasia. *Behavioral and Brain Sciences* 19:633-634.
- Bavelier D, Corina D, Jezzard P, Padmanabhan S, Clark VP, Karni A, Prinster A, Braun A, Lalwani A, Rauschecker JP, Turner R, Neville H (1997). Sentence Reading: A Functional MRI Study at 4 Tesla. *Journal of Cognitive Neuroscience* 9:664-686.
- Bavelier D, Corina D, Jezzard P, Clark V, Karni A, Lalwani A, Rauschecker JP, Braun A, Turner R, Neville HJ (1998). Hemispheric specialization for English and ASL: left invariance-right variability. *Neuroreport* 9:1537-1542.
- Bavelier D, Corina DP, Neville HJ (1998). Brain and language: a perspective from sign language. *Neuron* 21:275-278.
- Berninger VW, Corina D (1998). Making Cognitive Neuroscience Educationally Relevant: Creating Bidirectional Collaborations Between Educational Psychology and Cognitive Neuroscience. *Educational Psychology Review* 10:343-354.
- Corina D (1998). Aphasia in Users of Signed Languages. In: *Aphasia in Atypical Populations*. Coppens P, Lebrum Y, Baddo A (Eds). Erlbaum, Hillsdale, NJ, pp 261-310.
- Corina D (1998). The processing of sign language: Evidence from aphasia. In: *Handbook of Neurolinguistics*. Whitaker H, Stemmer B (Eds). Academic Press, San Diego, CA, pp 313-329.
- Corina D (1998). Studies of neural processing in deaf signers: toward a neurocognitive model of
- Corina DP, Bavelier D, Neville HJ (1998). Language representation in signers: A comparison of aphasia and fMRI data. *Trends in Cognitive Sciences* 2:468-470.

- Neville HJ, Bavelier D, Corina D, Rauschecker J, Karni A, Lalwani A, Braun A, Clark V, Jezzard P, Turner R (1998). Cerebral organization for language in deaf and hearing subjects: biological constraints and effects of experience. *Proc Natl Acad Sci U S A* 95:922-929.
- Corina D (1999). Sign language and the brain. In: *The MIT Encyclopedia of Cognitive Science*. Wilson RA, Keil F (Eds). MIT Press, Cambridge, MA.
- Corina DP (1999). Neural disorders of language and movement: Evidence from American Sign Language. In: *Gesture, Speech, and Sign*. Messing LS, Campbell R (Eds). Oxford University Press, Oxford.
- Corina DP (1999). On the nature of left hemisphere specialization for signed language. *Brain Lang* 69:230-240.
- Corina DP, Bellugi U, Reilly J (1999). Neuropsychological studies of linguistic and affective facial expressions in deaf signers. *Lang Speech* 42 ( Pt 2-3):307-331.
- Corina DP, McBurney SL, Dodrill C, Hinshaw K, Brinkley J, Ojemann G (1999). Functional roles of Broca's area and SMG: evidence from cortical stimulation mapping in a deaf signer. *Neuroimage* 10:570-581.
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- Bavelier D, Tomann A, Hutton C, Mitchell T, Corina D, Liu G, Neville H (2000). Visual attention to the periphery is enhanced in congenitally deaf individuals. *J Neurosci* 20:RC93.
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- Hildebrant U, Corina DP (2002). Phonological Similarity in American Sign Language. *Language and Cognitive Processes* 6:593-612.
- Newman AJ, Bavelier D, Corina D, Jezzard P, Neville HJ (2002). A critical period for right hemisphere recruitment in American Sign Language processing. *Nat Neurosci* 5:76-80.
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- Capek CM, Bavelier D, Corina D, Newman AJ, Jezzard P, Neville HJ (2004). The cortical organization of audio-visual sentence comprehension: an fMRI study at 4 Tesla. *Brain Res Cogn Brain Res* 20:111-119.
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- Carreiras M, Gutiérrez-Sigut E, Baquero S, Corina DP (2006). Lexical processing in Spanish Sign Language (LSE). *Journal of Memory and Languages* 58:100-122.
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- Corina DP, Knapp HP (2006). Lexical retrieval in American Sign Language production. In: *Laboratory Phonology 8: Varieties of Phonological Competence*. Goldstein L, Whalen DH, Best CT (Eds). Mouton de Gruyter, Berlin, pp 213-239.
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- Corina D, Chiu YS, Knapp H, Greenwald R, San Jose-Robertson L, Braun A (2007). Neural correlates of human action observation in hearing and deaf subjects. *Brain Res* 1152:111-129.
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- Corina DP, Knapp HP (2008). Signed language and human action processing: evidence for functional constraints on the human mirror-neuron system. *Ann N Y Acad Sci* 1145:100-112.
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- Grosvald, M. & David Corina (2008). Perception of sub-phonemic contrasts: Comparison of behavioral and event-related potential methodologies. *Proceedings, 38th Western Conference on Linguistics (WECOL)*. Davis, CA; November 2008.
- Grosvald, M. & David Corina. Location-to-Location coarticulation: A phonetic investigation of American Sign Language. *Proceedings, 24th Northwest Linguistics Conference*. Seattle, WA; May 2008.
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- Corina D, Grosvald M, Lachaud C. (2010). Perceptual invariance or orientation specificity in American Sign Language. Evidence from repetition priming for signs and gestures. *Language and Cognitive Processes*, 26 (8), 1102-1135.
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- Ojemann GA, Corina DP, Corrigan N, Schoenfield-McNeill J, Poliakov A, Zamora L, Zanos S (2010). Neuronal correlates of functional magnetic resonance imaging in human temporal cortex. *Brain* 133,45-59.
- Corina, D., Grosvald, M., & Lachaud, C. (2011). Perceptual invariance or orientation specificity in American Sign Language? Evidence from repetition priming for signs and gestures. *Language and Cognitive Processes*, 26(8), 1102-1135.
- Grosvald M, Lachaud C, Corina D. (2012). Handshape monitoring: Evaluation of linguistic and perceptual factors in the processing of American Sign Language. *Language and Cognitive Processes*. 2(1) pp. 117-141.
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- Grosvald, M., Gutierrez, E., Hafer, S., Corina, D.P. (2012) Dissociating linguistic and non-linguistic gesture processing: Electrophysiological evidence from American Sign Language *Brain & Language* 121 (2012) 12-24.

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- Corina, D.P. & Grosvald, M. (2012). Exploring perceptual processing of ASL and human actions: Effects of inversion and repetition priming. *Cognition*. Volume 122, Issue 3, March 2012, Pages 330–345
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- Grosvald, M; Corina, D. P. (2012). The perceptibility of long-distance coarticulation in speech and sign: A study of English and American Sign Language. In *Sign Language & Linguistics, New Methodologies in Sign Language Phonology: Papers from TISLR 1*
- Corina, D.P., Lawyer, L.A., Hauser, P. & Hirshorn, E. (2013). Lexical Processing in Deaf Readers: An fMRI Investigation of Reading Proficiency. *PLOS ONE*. Jan. Vol.8. Issue1.
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#### **d. Chapters (Since 2011).**



Corina, D.P. and Spotswood N (2012). Neurolinguistics. In Sign Language: An International Handbook. In Handbooks of Linguistics and Communication Science Editors: Roland Pfau, Markus Steinbach & Benci Woll Mouton de Gruyter GmbH & Co Berlin Germany.

Corina, David P., Gutierrez,E., and Grosvald, M. (2014). "Sign language production: An overview." The Oxford handbook of language production. Pp.393-416.

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