## Curriculum Vitae October 2011

I. <u>Personal Data</u>		
Name:	Gloria Sydna Waters	
Born:	Montreal, Quebec, Canada	
	August 5, 1953	
Citizenship:	American/Canadian	
Office Address:	Boston University College of Health & Rehabilitation Sciences: Sargent College 635 Commonwealth Ave. Boston, MA 0221	
II. Education		
B.A. (1975)	Honors Psychology	McGill University Montreal, Quebec.
M.A. (1977)	Applied Psychology	Concordia University Montreal, Quebec.
Ph.D. (1981)	Psychology	Concordia University Montreal, Quebec.
Post-doctoral Fellow (1981-83)	School of Communication Sciences and Disorders	McGill University Montreal, Quebec.

## III. Educational Awards and Honors

<u>Undergraduate</u> Scholarship for High Scholastic Achievement, McGill University First Class Honors, McGill University University Scholar, McGill University	1974-75 1975-76 1975-76
<u>Graduate</u> Quebec Government Graduate Fellowship Canada Council Doctoral Fellowship	1976-80 1978-81
<u>Post-graduate</u> Social Sciences and Humanities Research Council of Canada Post-doctoral Fellowship	1981-83
<u>Career Investigator Awards (Salary Support</u> ) Medical Research Council of Canada Centennial Fellowship	1985-87

National Health and Welfare Canada National Health Scholar Award Fonds de la Recherche en Sante du Quebec Chercheur Boursier Award	1985-90 1985-88
Natural Sciences and Engineering Research Council of Canada Faculty Award for Women	1985-93
Royal Society London, U.K./Natural Sciences and Engineering Research Council of Canada Bilateral Exchange Fellowship	1992-93
IV. <u>Employment History</u>	
<ol> <li>Dean, Boston University College of Health &amp; Rehabilitation Sciences: Sargent College</li> </ol>	2005-Present
<ol> <li>Chair, Dept. of Health Sciences, Boston University</li> <li>Chair, Dept. of Speech, Language and Hearing Sciences, Boston University</li> </ol>	2002-2005 2001-2002
4. Acting Chair, Dept. of Speech, Language and Hearing Sciences, Boston University	1999-2000
5. Professor, Dept. of Speech, Language and Hearing Sciences, Boston University	1997-Present
6. Acting Director, School of Communication Sciences and Disorders Faculty of Medicine, McGill University	1996-1997
<ol> <li>Associate Professor, School of Communication Sciences and Disorders, Faculty of Medicine, McGill University</li> </ol>	1991-1997
<ol> <li>8. Adjunct Professor, Division of Geriatric Medicine, McGill University</li> <li>9. Associate in Neurology, Massachusetts General Hospital and Harvard University</li> </ol>	1993-2000 1993-Present
10. Research Associate, Spaulding Rehabilitation Hospital, Boston, MA.	1993-2000
<ol> <li>Lorraine C. Snell Visiting Professor in Health Care, Dept. of Communication Disorders, Northeastern University, Boston, MA.</li> </ol>	1994-95
12. Assistant Professor, School of Communication Sciences and Disorders, McGill University	1985-91
13. Research Associate, Montreal Neurological Institute Neurolinguistics Group	1985-88
14. Research Associate, School of Communication Sciences and Disorders, McGill University	1983-85
15. Post-doctoral Fellow, School of Communication Sciences and Disorders, McGill University	1981-83
16. Neuropsychology Intern, Dept. of Neurology, Montreal Children's Hospital	1980-81
17. Lecturer, Concordia University, Psychology Department	1981-84
18. Part-time Psychologist, Lansdowne Tutoring Center	1977-78
19. Intern, McGill Montreal Children's Hospital Learning Center	1976
20. Intern, Applied Psychology Center, Concordia University	1975-77
21. Part-time Psychometrician, Laval School Commission	1975
22. Teaching Assistant, Psychology Department, Concordia University	1975-76
23. Teaching Assistant, Psychology Department, McGill University	1974-75
24. Research Assistant, Speech and Language Research Project, Jewish General Hospital	1973-74

## V. Administrative Responsibilities

## **Boston University**

2010-2011
2009-2010
2009-2010
2009-2010
2009-2010
2009-2010
2008-2009
2008 2009 2007-Present
2006-2009
2000-2009
2003-2000
2005 2006
2005-2006
2000-2001
<b>2</b> 005 D
2005-Present
2001-2005
2001-2005
2000-01
1999-00
1999-00
1999-00
1999-00
1997-00
1998-00
2002-2005
2002-2003
2001.02
2001-02
2001-02
2000-01
1999-00
1997-04
1999-00
1006.07
1996-97
1996-97
1996-97
1996-97

Pathologists and Audiologists of Quebec	
Member McGill University Faculty Senate	1995-96
Director of the McGill-IBM Cooperative Project	1990-92
Director of the Cognitive Psychopathology Section	1988-92
of the McGill-IBM Co-operative Project	
Council Member, McGill University Faculty of Graduate	1989-90
Studies and Research	

#### School of Communication Sciences and Disorders, McGill University

Acting Director	1996-97
Research Leave	1994-95
Sabbatical	1992-93
Research Director	1990-92
Ph.D. Program Director	1990-92
Chair Task Force on the Ph.D. Program	1990
Member of the Executive Committee	1990- 92
Research Lab Coordinator	1988-92
Member of Faculty Search Committee in Audiology	1990
Member of Faculty Search Committee in Speech-language Pathology	1989
Member of the Curriculum Committee	1989-94
Member of Search Committee for a Director	1987
Member of the Admissions Committee for Speech Language Pathology	1985-97

#### VI. Key Accomplishments in Service at Boston University

• Member of the Presidential Search Committee providing me with the opportunity to work with university Trustees and other senior faculty and administrators

• Appointed by the President as Co-chair of the Council on Faculty Diversity and Inclusion. The goal of the Council was to recommend policies and actions to help BU sustain an environment that attracts and supports a diverse faculty with the ultimate goal of enriching the intellectual environment and increasing excellence. Chaired a committee of 13 faculty over a period of 2 years, carried out the first faculty climate survey and statistical analysis of faculty salaries. Responsible for writing of a 260-page report for the President and Provost and preparing the public document for dissemination to the faculty.

• Chaired a national Search for a University Ombuds, selecting the candidate from over 150 applicants

• Played a role in the development of university policies related to research compliance as a member of the committee charged with making recommendations concerning the merger of the CRC and MED Institutional Review Boards, as well as the committee charged with developing the Institutional Conflict of Interest Policy

• Co-chaired of the committee charged with re-vamping Freshman Orientation providing an opportunity to work with a wide range of staff from the Dean of Students Office

• Member of the task force charged with developing a plan for the establishment of a Health Sciences campus in Abu Dhabi. Wrote a proposal for the development of a College of Health and Rehabilitation Sciences and traveled to Abu Dahbi to meet with relevant authorities

• Visited the National University of Singapore in an effort to develop a collaboration around the establishment of a College of Allied Health Professions. Wrote a white paper on a Strategic Vision for the Future of the Allied Health Professions in Singapore and Asia which was presented to the President of the National University of Singapore, as well as the Minister of Health, the Minister of Education and the Minister of Employment

### VII. Research and Scholarship **Research Interests**

Individual Differences in Working Memory Capacity and Language Comprehension Sentence Comprehension in Aphasia Localization of Language Functions Psycholinguistic Assessment of Acquired Language Disorders Acquisition of Reading and Spelling Skills Assessment of Reading Skills in Older Struggling Readers Effects of Deafness on Word Recognition and Reading Ability

## **Teaching Experience**

Psychology of Reading Adult Language Disorders Aging and Communication Language Learning Disabilities **Research Methods** 

# Membership on Research Grant and Scholarship Committees

Ad Hoc Member of the Perception and Cognition Study Section Panel, National Institutes of Health	2000-01
Member of the Behavioral Sciences Evaluation Committee for Research Grants, Medical Research Council of Canada (MRC)	1994-97
Member of the Psychology and Linguistics Evaluation Committee for Team Research Grants, Le Fonds Pour La Formation du Chercheurs et l'Aide a la Recherche (FCAR)	1991-94
Member of the Selection Committee for University Research Fellowships and Faculty Awards for Women, Natural Sciences and Engineering Research Council of Canada (NSERC)	1990-93
Member of the Life Sciences Scholarships and Fellowships Committee Natural Sciences and Engineering Research Council of Canada (NSERC)	1989-90
Member of the Basic Science Graduate Scholarship Committee, Le Fonds Pour La Formation du Chercheurs et l'Aide a la Recherche (FCAR)	1988-90
Member of the Applied Science Graduate Scholarship Committee, Le Fonds Pour La Formation du Chercheurs et l'Aide a la	1987-88

Recherche (FCAR)

### **Grant Reviews**

Social Science and Humanities Research Council of Canada Natural Sciences and Engineering Research Council of Canada Medical Research Council of Canada Fonds de la Recherche en Sante du Quebec Le Fonds FCAR (Quebec)

## **Research Grant Funding**

National Institute of Deafness and Communication Disorders (R01) Principal Investigator: G. Waters, Co-investigators: D. Caplan, N. Pearlmutt Total Costs: \$1,546,718	12 <sup>th</sup> %ile er Recommended but not funded due to lack of funds
<b>U.S. Department of Education: Institute of Education Sciences</b> Title: Assessment of Comprehension in Older Struggling Readers Principal Investigator: <b>G. Waters</b> , Co-investigator: D. Caplan Total Costs: \$1,597,063	2010-14
National Institute of Deafness and Communication Disorders (R21/R33) Title: Theoretically Based Treatment for Sentence Comprehension in Aphasi Principal Investigator: S. Kiran, Co-PI's: D. Caplan, G. Waters Total Costs: \$2,234,980	
National Institute of Deafness and Communication Disorders (R01) Title: Functional Neuroimaging Studies of Syntactic Comprehension Principal Investigator: D. Caplan, Co-investigator: G. Waters Total Costs: \$1,653,825	2007-10
<b>U.S. Department of Education: Institute of Education Sciences</b> Title: Assessment of Comprehension in Older Struggling Readers Principal Investigator: <b>G. Waters</b> , Co-investigator: D. Caplan Total Costs: \$1,255,025	2005-09
National Institute of Aging (R01) Title: Language Comprehension in Aging and AD Principal Investigator: G. Waters, Co-investigators: D. Caplan, N. Alpert Total Costs: \$1,753,976	2002-07
National Institute of Deafness and Communication Disorders (R01) Title: Plausibility and Syntactic Processing Load Principal Investigator: N. Pearlmutter, Co-investigators: D. Caplan, G. Wate P. Holcomb Total Costs: \$2,409,500	2002-07 rs,
<b>National Institute of Deafness and Communication Disorders (R01)</b> Title: Sources of rCBF Effects in Syntactic Comprehension	2002-07

6

Principal Investigator: D. Caplan, Co-investigators: N. Alpert G. Waters Total Costs: \$950,386	
National Institute of Deafness and Communication Disorders (R01) Title: Functional Neuroimaging Studies of Syntactic Processing Principal Investigator: D. Caplan, Co-investigator: G. Waters Total Costs: \$1,653,825	2001-06
National Institute of Deafness and Communication Disorders (R01) Title: An Investigation of the Trace Deletion Hypothesis Principal Investigator: D. Caplan, Co-investigators: G. Waters, N. Alpert Total Costs: \$606,300	2000-04
National Institute of Aging (R01) Title: Sentence Processing in Aging and DAT Principal Investigator: <b>G. Waters</b> , Co-investigators: D. Caplan, N. Alpert Total Costs: \$1,247,695	1997-02
National Institute of Deafness and Communication Disorders (R01) Title: Localization of Disorders of Syntax-Based Comprehension Principal Investigator: D. Caplan, Co-investigators: G. Waters, N. Alpert Total Costs: \$2,256,184	1997-02
Medical Research Council of Canada Title: Working Memory Capacity and Language Comprehension in Parkinson's Disease Principal Investigator: <b>G. Waters</b> Total Costs: \$370,765	1997-00
<b>Natural Sciences and Engineering Research Council</b> Title: The nature of the representations used in auditory-verbal short-term mer Principal Investigator: <b>G. Waters</b> Total Costs : \$160,000	1996-00 nory
Le Fonds de Recherche en Sante du Quebec (FRSQ) Title: Early diagnosis of Alzheimer's disease Multidisciplinary investigation mild memory impairment in the elderly Principal Investigators: H. Chertkow, D. Lorrain, G. Waters Total Costs: \$134,532	1997-99 of
<b>Le Fonds FCAR</b> Title: Selective impairments of the ability to abstract form and meaning Principal Investigators <b>G. Waters</b> , S. Baum & H. Chertkow Total Costs: \$113,059	1996-99
Medical Research Council of Canada Title: Working Memory and Language Comprehension Principal Investigator: G. Waters Total Costs: \$135,000	1994-97

Alzheimer's Association of America Title: Cognitive and Positron Emission Tomography Studies in Alzheimer's Disease Co-investigators: G. Waters, H. Chertkow Total Costs: \$65,000	1994-97
Le Fonds de Recherche en Sante du Quebec (FRSQ) Title: Early diagnosis of Alzheimer's disease Multidisciplinary investigation mild memory impairment in the elderly Co-investigators: H. Chertkow, D. Lorrain, G. Waters Total Costs: \$150,000	1995-97 1 of
National Institutes of Aging Title: Processing resources and sentence comprehension in patients with DAT Principal Investigator: D. Caplan, Co: PI's G. Waters and J. Sherman Total Costs: \$890,723	1992-96
National Institute on Neurological Disease and Stroke Title: Neuropsychological models and focal CNS disease Prinicipal Investigator: D. Caplan, Co: Investigator: G. Waters Total Costs: \$689,130	1993-97
<b>Natural Sciences and Engineering Research Council of Canada</b> Title: The nature of representations used in language processing Principal Investigator: <b>G. Waters</b> Total Costs: \$87,000	1993-96
<b>Le Fonds FCAR</b> Title: Selective impairments of the ability to abstract form and meaning Principal Investigators: <b>G. Waters</b> , S. Baum, H. Chertkow, & D. Bub Total Costs: \$264,000	1993-96
Le Fonds de Recherche en Sante du Quebec (FRSQ) Title: Early diagnosis of Alzheimer's disease Co-investigators: H. Chertkow, D. Lorrain & G. Waters Total Costs: \$150,000	1993-95
Medical Research Council of Canada Title: Disorders of syntactic comprehension Principal Investigator G. Waters; Co-investigator Dr. D. Caplan Total Costs: \$135,000	1991-94
<b>Hoffmann-LaRoche Inc.</b> Title: Cognitive studies of Lazabemide in Alzheimer's Disease Co-investigator with H. Chertkow Total Costs: \$75,000	1993-94

Natural Sciences and Engineering Research Council of Canada199Title: An investigation of the processes used in single word reading and spelling: Insights from the congenitally deaf199Principal Investigator: G. Waters Total Costs: \$74,460199	0-93
<ul> <li>Alzheimer's Association of America Investigator-Initiated Research Grant 199</li> <li>Title: Processing resources in sentence comprehension in aging and dementia of t</li> <li>Alzheimer's type</li> <li>Principal Investigator: G. Waters</li> <li>Total Costs: \$132,984</li> </ul>	0-93 he
Le Fonds FCAR 198 Title: The role of auditory verbal short-term memory in language comprehension Principal Investigators: G. Waters, S. Baum, T. Gallagher, K. Watkin Total Costs: \$88,500	9-92
Medical Research Council of Canada198Title: Syntactic comprehension after brain damage and syntactic comprehension198in aphasiaPrincipal Investigator: G. WatersTotal Costs:\$188,111	8-91
Natural Sciences and Engineering Research Council of CanadaTitle: Processes involved in word recognition and sentence comprehension198Principal Investigator: G. WatersTotal Costs: \$44,000	8-90
Title: The Acquisition of Spelling Skills in Children Principal Investigator: <b>G. Waters</b>	5-88
	5-88
Journal Editorial Reviews	
Memory and Cognition Journal of Experimental Child Psychology Language and Cognitive Processes Journal of Memory and Language Quarterly Journal of Experimental Psychology Cognitive Neuropsychology Journal of Experimental Psychology: Learning, Memory and Cognition	

Journal of Experimental Psychology: Learning, Memory and Cognition Speech and Language Journal of Speech Language Pathology and Audiology The Volta Review Canadian Journal of Behavioral Science

### **Publications**

### 1. Peer-Reviewed Papers

- Evans, W.S., Waters, G.S., & Caplan, D. (in press). Effects of concurrent arithmetical and syntactic complexity on self-paced reaction times and eye fixations. **Psychological Bulletin and Review**.
- Caplan, D., DeDe, G., Waters, G., Michaud, J., Tripodis, Y. (2011). Effects of Age, Speed of Processing and Working Memory on Comprehension of Sentences with Relative Clauses, Psychology and Aging, 26(2), 439-450.
- McAllister, T., Bachrach, A., Waters, G., Michaud, J. & Caplan, D. (2009). Production and comprehension of unaccusatives in aphasia. Aphasiology, 23(7-8), 989-1004.
- Caplan, D., Chen, E. & Waters, G. (2008). Task-dependent and task-independent neurovascular responses to syntactic processing. Cortex, 44(3), 257-275.
- Caplan, D., Stanczak, L., Waters, G. (2008). Syntactic and thematic constraint effects on blood oxygenation level dependent signal correlates of comprehension of relative clauses. J Cogn Neurosci. 20(4), 643-56.
- Caplan, D., Waters, G., Dede, G., Michaud, J. & Reddy, A. (2007). A study of syntactic processing in aphasia I: behavioral (psycholinguistic) aspects. Brain Lang. 101(2), 103-150.
- Caplan, D., Waters, G., Kennedy, D., Alpert, N., Makris, N., Dede, G., Michaud, J. & Reddy, A. (2007). A study of syntactic processing in aphasia II: neurological aspects. Brain Lang. 101(2), 151-177.
- Caplan, D., Stanczak, L., Waters, G. (2007). Syntactic and thematic constraint effects on BOLD signal correlates of comprehension of relative clauses. Brain and Language, 103(1-2), 8-9.
- Chen, E., Caplan, D., West, W.C. & Waters, G.S. (2006). Determinants of BOLD Signal Correlates of Processing Object-Extracted Relative Clauses, **Cortex**, **42**, 591-604.
- Stanczak, L., Waters, G. & Caplan, D. (2006). Typicality-based learning and generalization in aphasia: two case studies of anomia. **Aphasiology**, **20**, 374-383.
- Caplan, D., Chen, E., Waters, G. & Robakis, D. (2005). Syntactic and semantic influences on BOLD signal responses to comprehension of relative clauses. **Brain and Language**, **95**, 72-73.
- Waters, G.S. & Caplan, D. (2005). The relationship between age, processing speed, working memory capacity and language comprehension. **Memory**, **13**, 403-413.

- Caplan, D., Waters, G., DeDe, G., Michaud, J. & Reddy, A. (2004). A Study of Syntactic Processing in Aphasia I: Behavioral (Psycholinguistic) Aspects, **Brain and Language**, **91**, 64-65.
- Caplan, D., Waters, G., Kennedy, D., Alpert, N., Makris, N., DeDe, G., Michaud, J. & Reddy, A. (2004). A Study of Syntactic Processing in Aphasia II: Neurological Aspects, Brain and Language, 91, 66-67.
- DeDe, G., Caplan, D., Kemtes, K. & Waters, G.S. (2004). The relationship between age, verbal working memory, and language comprehension. **Psychology & Aging, 19**, 601-616.
- Waters, G.S. & Caplan, D. (2004) The reliability and stability of verbal working memory measures. Behavior Research Methods, Instruments, and Computers, 35, 550-564.
- Waters, G.S., & Caplan, D. (2004) Individual differences in working memory capacity and on-line syntactic processing: Evidence from self-paced listening. **Quarterly** Journal of Experimental Psychology A, 57, 129-163.
- Waters, G.S., Caplan, D., & Yampolsky, S. (2003). On-line syntactic processing under a concurrent memory load. Psycholnomic Bulletin and Review, 10, 89-95.
- Waters, G.S., Caplan, D., Alpert, N. & Stanczak, L. (2003) Individual differences in rCBF correlates of syntactic processing in sentence comprehension: Effects of working memory and speed of processing. Neuroimage, 19, 101-112.
- DeDe, G., Parris, D. & Waters, G.S. (2003). Teaching Self-Cues: A treatment approach for verbal naming. Aphasiology, 17, 465-480.
- Caplan, D., Waters, G.S., & Alpert, N. (2003). Effects of age and speed of processing on rCBF correlates of syntactic processing in sentence comprehension. Human Brain Mapping. 19, 112-131.
- Caplan, D. & Waters, G. (2003). On-line syntactic processing in aphasia: Studies with auditory moving window presentation. **Brain & Language**, **84**, 222-249.
- Waters, G.S., & Caplan, D. (2002). Verbal working memory and language comprehension. Encyclopedia of Cognitive Science. Nature Publishing Group, Macmillan Publishers, Basingstoke, England.
- Waters, G.S. & Caplan, D. (2002). Working memory and on-line syntactic processing in Alzheimer's disease: Studies with auditory moving windows presentation. Journal of Gerontology: Psychological Sciences, 57B, 298-311.
- Caplan, D. & Waters, G.S., (2002). Working memory and connectionist models of parsing: A response to MacDonald and Christiansen. **Psychological Review**, **109**, 66-74.
- Caplan, D., Vijayan, S., Kuperberg, G., West, C., Waters, G., Greve, D., Dale, A.M. (2002). Vascular response to syntactic processing: an event-related fMRI study of relative clauses. Human Brain Mapping. 15, 26-38
- Yampolsky, S. & Waters, G. (2002). Treatment of single word oral reading in an individual with deep dyslexia. Aphasiology, 16, 455-471.

- Yampolsky, S., Waters, G., Caplan, D., Matthies, M., & Chiu, P. (2002). Effects of acoustic degradation on syntactic processing: Implications for the nature of the resource system used in language processing. Brain and Cognition, 48, 617-625.
- Titone, D., Wingfield, A., Caplan, D., Waters, G., & Prentice, K. (2001). Memory and encoding of spoken discourse following right hemisphere damage: Evidence from the auditory moving window (AMW) technique. **Brain and Language**, **77**, 10-24.
- Waters, G.S. & Caplan, D. (2001). Age, working memory and on-line syntactic processing in sentence comprehension. **Psychology and Aging, 16**, 128-144.
- Caplan, D. & Waters, G.S. (2001) Working memory and syntactic processing in sentence comprehension. Bulletin of the Japanese Cognitive Science Society, 8, 10-42.
- Rochon, E., Waters, G.S., & Caplan, D. (2000). The relationship between measures of working memory and sentence comprehension in patients with Alzheimer's disease. Journal of Speech, Language and Hearing Research, 43(2), 395-413.
- Caplan, D., Alpert, N., Waters, G.S. & Oliveri, A. (2000) Activation of Broca's area by Syntactic Processing under conditions of concurrent articulation **Human Brain Mapping**, 9, 65-71.
- Waters, G.S., Caplan, D. & Dufault, C. (2000). The relationship between working memory capacity and online sentence processing efficiency in patients with DAT. **Brain and Language**, **74**(3), 332-334.
- Caplan, D., Vijayan, S., Kuperberg, G., et al. (2000). Localization of syntactic processing in sentence comprehension by event-related fMRI. **Brain and Language**, **74**(3), 400-402.
- Kuperberg, G., Dale, A., Greve, D., et al. (2000). Neural activity during pragmatic and syntactic processing of sentences: Evidence from event-related fMRI and brain potentials. Journal of Cognitive Neuroscience, 46-47, Suppl. Meeting Abstract: 21B.
- Caplan, D. & Waters, G.S. (1999). Issues regarding general and domain-specific resources. **Behavioral and Brain Sciences**, **22**, 114-126.
- Caplan, D. & Waters, G.S. (1999) Verbal working memory and sentence comprehension. Behavioral and Brain Sciences. 22, 77-126.
- Caplan, D., N., Alpert, N., & Waters, G.S. (1999). PET studies of sentence processing with auditory sentence presentation. **Neuroimage**, **9**, 343-351.
- Caplan, D., Alpert, N. & Waters, G. (1999). Brain organization for syntactic processing studied with positron emission tomography. Journal of Cognitive Neuroscience, 9, Suppl.
- Caplan, D. & Waters, G. (1999). Online syntactic processing in aphasia: Studies with auditory moving window presentation. **Brain and Language**, **69**(3), 330-333.

- Caplan, D. Alpert, N. & Waters, G.S. (1998). Effects of syntactic structure and propositional number on patterns of regional cerebral blood flow. Journal of Cognitive Neuroscience, 10, 541-552.
- Waters, G.S., Rochon, E., & Caplan, D. (1998). Task demands and sentence comprehension in patients with Dementia of the Alzheimer's Type. Brain and Language, 62, 361-397.
- Caplan, D., Waters, G.S., & Hildebrandt, N. (1997). Determinants of sentence comprehension in aphasic patients in sentence-picture matching tests. Journal of Speech Language and Hearing Research, 40, 542-555.
- Waters, G.S. & Caplan, D. (1997). Working memory and on-line sentence comprehension in patients with Alzheimer's disease. Journal of Psycholinguistic Research, 26, 377-400.
- Leonard, C., Waters, G.S. & Caplan, D. (1997). The influence of contextual information on the resolution of ambiguous pronouns by younger and older adults. **Applied Psycholinguistics 18**, 293-317.
- Leonard, C., Waters, G.S., & Caplan, D. (1997). The use of contextual information related to general world knowledge by right brain-damaged individuals in pronoun resolution. Brain and Language, 57, 343-359.
- Leonard, C., Waters, G.S., & Caplan, D. (1997). The use of contextual information by right brain-damaged individuals in the resolution of ambiguous pronouns. **Brain and Language**, **57**, 309-342.
- Waters, G.S. & Caplan, D. (1997). The role of working memory in sentence processing: Evidence from Parkinson's disease. **Brain and Language**, **60**(1), 64-66.
- Caplan, D., Alpert, N. & Waters, G. (1997). Effects of syntactic structure and number of propositions on patterns of regional cerebral blood flow. **Brain and Language, 60**(1), 66-69.
- Titone, D., Wingfield, A., Caplan, D., et al. (1997). Discourse encoding strategies of right hemisphere damaged patients. **Brain and Language**, **60**(1), 183-185.
- Waters, G.S. & Caplan, D. (1996). The capacity theory of sentence comprehension: Critique of Just and Carpenter (1992). Psychological Review, 103, 761-772.

Caplan, D. & Waters, G.S. (1996). Syntactic processing in sentence comprehension under dualtask conditions in aphasic patients. Language and Cognitive Processes, 11, 525-551.

Waters, G.S. & Caplan, D.(1996). Processing resource capacity and the comprehension of garden path sentences. Memory and Cognition, 24, 342-355.

Waters, G.S. & Caplan, D. (1996). The measurement of verbal working memory

capacity and its relation to reading comprehension. Quarterly Journal of Experimental Psychology A, 49, 51-79.

- Waters, G.S., Caplan, D. & Rochon, E. (1995). Processing capacity and sentence comprehension in patients with Alzheimer's Disease. Cognitive Neuropsychology, 12, 1-30.
- Caplan, D. & Waters, G.S. (1995). Aphasic disorders of syntactic comprehension and working memory capacity. Cognitive Neuropsychology, 12, 637-649.
- Caplan, D. & Waters, G.S. (1995). On the nature of the phonological output planning processes involved in verbal rehearsal: Evidence from aphasia. **Brain and Language**, **48**, 191-220.
- Caplan, D. & Waters, G.S. (1994). Articulatory length and phonological similarity in span tasks: A reply to Baddeley and Andrade. Quarterly Journal of Experimental Psychology A, 47, 1055-1062.
- Caplan, D., Hildebrandt, N., & Waters, G.S. (1994). Interaction of verb selectional restrictions, noun animacy and syntactic form in sentence processing. Language and Cognitive Processes, 9, 549-585.
- Caplan, D. & Waters, G.S. (1994). Syntactic processing in sentence comprehension by aphasic patients under dual-task conditions. **Brain and Language**, **47**(3), 397-399.
- Waters, G.S. & Caplan, D. (1994). Syntactic processing in sentence comprehension under dualtask conditions. **Brain and Language**, 47(3), 515-518.
- Rochon, E., Waters, G.S. & Caplan, D. (1994). Sentence comprehension in patients with Alzheimer's disease. **Brain and Language**, **46**, 329-349.
- Chertkow, H.M., Bub, D., Waters, G., et al. (1993). Separate effects of instructions and stimuli on cerebral blood-flow A O-15 positron emission tomographic study. **Neurology**, **43**(4), A189, Suppl. 2.
- Waters, G., Rochon, E., & Caplan, D. (1992). The role of high-level speech planning in rehearsal: Evidence from patients with apraxia of speech. Journal of Memory and Language, 31, 54-73.
- Caplan, D., Rochon, E., & Waters, G.S. (1992). Articulatory and phonological determinants of word-length effects in span tasks. Quarterly Journal of Experimental Psychology A, 45, 177-192.
- Waters, G.S., Caplan, D., & Leonard, C. (1992). The role of phonology in reading comprehension: Implications of the effects of homophones on processing sentences with referentially dependent categories. Quarterly Journal of Experimental Psychology A, 44, 343-372.
- Chertkow, H., Hamel, E., Bub, D., et al. (1992). Increased anterior cingulate activation during cognitive processing in Alzheimer's disease patients. Annals of Neurology, 32(2), 241.

- Waters, G.S. (1992) Basic processes in reading visual word recognition Besner, D., Humphreys, G.W. Canadian Journal of Psychology-Revue Canadienne De Psychologie, 46(1), 138-141.
- Waters, G.S., Caplan, D., & Hildebrandt, N. (1991). On the structure of verbal short-term memory and its functional role in sentence comprehension: Evidence from neuropsychology. Cognitive Neuropsychology, 8, 81-126.
- Waters, G.S., Ahmad, M., Katsarkas, A., Stanimir, G., & McKay, J. (1991) Oxtocity due to Cisdiamminedichloroplatinum (II) in the treatment of ovarian cancer: influence of dosage and schedule of administration. Ear and Hearing, 12, 91-102.
- Bruck, M. & Waters, G.S. (1990). Effects of reading skills on component spelling skills. **Applied Psycholinguistics**, **11**, 425-437.
- Rochon, E., Caplan, D., & Waters, G.S. (1990). Short-term memory in patients with apraxia of speech: Implications for the nature and structure of the auditory verbal short-term memory system. **Journal of Neurolinguistics**, **5**, 237-264.
- Butler-Hinz, S., Caplan, D., & Waters, G.S. (1990). Characteristics of syntactic comprehension deficits following closed head injury versus left cerebrovascular accident. Journal of Speech and Hearing Research, 33(2), 269-280.
- Waters, G.S., & Meaney, M.J. (1989). Peer commentary on "Exercises in Behavioral Explanation" by Gerald M. Siegel. Journal of Speech Language Pathology and Audiology, 13, 10-11.
- Seidenberg, M.S. & Waters, G.S. (1989). Reading eords sloud A mega study. Bulletin of the Psychonomic Society, 27(6), 489.
- Waters, G.S., & Bruck, M. & Malus-Abramowitz, M. (1988). The role of linguistic and visual processes in spelling: A developmental study. Journal of Experimental Child Psychology, 45, 400-421.
- Bruck, M. & Waters, G.S. (1988). An analysis of the spelling errors of children who differ in their reading and spelling skills. **Applied Psycholinguistics**, **9**, 77-92.
- Waters, G.S., Caplan, D., & Hildebrandt, N. (1987). Working memory and written sentence comprehension. Attention and Performance XII, 531-555.
- Hobbs, C., Crago, M. & Waters, G.S. (1987). The accuracy of parents and teachers judgment of Inuit children's hearing loss. **Human Communication Canada**, **11**, 13-16.
- Waters, G.S. (1987). Cognitive development in atypical children: A review. Canadian Journal of Psychology, 28, 77-78.
- Waters, G.S., Komoda, M.K. & Arbuckle, T.Y. (1985). The effects of concurrent tasks on reading: Implications for phonological recoding. Journal of Memory and Language, 24,

27-45.

- Waters, G.S., & Seidenberg, M.S. (1985). Spelling-sound effects in reading: Time course and decision criteria. Memory and Cognition, 13, 557-572.
- Waters, G.S., Bruck, M. & Seidenberg, M. S. (1985). Do children use similar processes to read and spell words? Journal of Experimental Child Psychology, 39, 511-530.
- Seidenberg, M.S., Waters, G.S., Barnes, M., & Tanenhaus, M.K.(1984). When does irregular spelling or pronunciation influence word recognition? Journal of Verbal Learning and Verbal Behavior, 23, 383-404.
- Seidenberg, M.S., Waters, G.S., Sanders, M., & Langer, P. (1984). Pre- and post-lexical loci of contextual effects on word recognition. Memory and Cognition, 1984, 12(4), 315-328.
- Waters, G.S., Seidenberg, M.S., & Bruck, M. (1984). Children's and adults' use of spellingsound information in three reading tasks. **Memory and Cognition**, **12(3)**, 293-305.
- Doehring, D.G., Backman, J., & Waters, G.S. (1983). Theoretical models of reading disabilities: Past, Present, and Future. **Topics in Learning and Learning Disabilities**, **3(1)**, 84-94.

### 2. Book Chapters

- Traxler, M.J., Caplan, D., Long, D.L., & Waters, G.S. (in press). Working memory in sentence comprehension and production. In F. Columbus (Ed.), Working Memory: Capacity, Developments, and Improvement Techniques. Hauppage, NY: Nova Science Publishers.
- Caplan, D. & Waters, G. (2006). Disorders of Aphasic Comprehension, in M. Traxler (Ed.), Handbook of Psycholinguistics.
- Caplan, D. & Waters, G.S., & DeDe, G. (2006). Specialized verbal working memory for language comprehension. To appear in A. Conway, C. Jarrold, M. Kane, A.Miyake, & J. Towse, (Eds.) Variations in working memory. Oxford University Press.
- Caplan, D. & Waters, G.S. (2006). Language disorders in aging. To appear in E. Bialystok & G. Craik (Eds.) Lifespan Cognition: Mechanisms of Change. Oxford University Press.
- Caplan, D., Alpert, N. & Waters, G.S. (2002). Brain organization for syntactic processing studied with Positron Emission Tomography. In A. Galaburda & S. Kosslyn (eds.) The Languages of the Brain, pp.57-68. Paris, Springer Verglag.
- Caplan, D. & Waters, G.S. (2000). Sentence comprehension in Alzheimer's disease. In L. Connor & L.K. Menn (Eds). Neurobehavior of language and cognition: Studies of Normal Aging and Brain Damage, pp. 61-76. Kluwer Academic Publishers, Boston, MA.
- Waters, G.S. & Caplan, D. (1999). Verbal working memory capacity and on-line sentence processing efficiency in the elderly. In S. Kemper & R. Kliegl (Eds.) Constraints on language: Aging, Grammar, and Memory, pp. 107-136. Kluwer Academic

Publications; Boston/Dordrecht/London.

- Caplan, D. & Waters, G.S. (1999). Age effects on the functional neuroanatomy of syntactic processing in sentence comprehension. In S. Kemper & R. Kliegl (Eds.) Constraints on language: Aging, Grammar, and Memory, pp. 283-298. Kluwer Academic Publications; Boston/Dordrecht/London.
- Wingfield, A., Waters, G.S., & Tun, P. (1997). Does working memory work in language comprehension? Evidence from Cognitive Neuroscience. In N. Raz (ed.) The Other Side of the Error Term: Aging and Development as Model Systems in Cognitive Neuroscience, North-Holland, pp. 319-394.
- Waters, G.S. & Caplan, D. (1995). What the study of patients with speech disorders and of normal speakers tells us about the nature of verbal rehearsal. In R. Campbell and M. Conway (eds.), Broken Memories, Blackwell Publications, pp. 302-330.
- Caplan, D. & Waters, G.S.(1992) Issues arising regarding the nature and consequences of reproduction conduction aphasia. In S.E. Kohn (ed.) Conduction Aphasia, Lawrence Erlbaum, 117-149.
- Mayberry, R. & Waters, G.S. (1991). Children's memory for sign and fingerspelling in relation to production rate and sign language input. In P. Siple (ed.), Theoretical Issues in Sign Language Research Vol. 2. University of Chicago Press, pp. 211-229.
- Caplan, D. & Waters, G.S. (1990). The role of short-term memory in language comprehension: A critique of the neuropsychological literature. In T. Shallice & G. Vallar (eds.)
   Neuropsychological impairments of short-term memory. Cambridge University Press, pp. 337-389.
- Waters, G.S. & Doehring, D. (1990). Reading Acquisition in Congenitally Deaf Children who Communicate Orally: Insights from an Analysis of Component Reading, Language, and Memory Skills. In T. Carr & B.A. Levy (eds.) Reading and Its Development: Component Skills Approaches, Academic Press, pp. 323-373.
- Bruck, M. & Waters, G.S. (1990). An analysis of the reading skills of good readers-good spellers, good readers-poor spellers, and poor readers-poor spellers. In T. Carr & B.A. Levy (eds.)
  Reading and Its Development: Component Skills Approaches, Academic Press, pp. 161-202.

### **Invited Presentations**

- Assessment of Reading and Language Skills in Middle and High School Students, National Research Council, Washington, D.C., September 2009.
- The roles of general cognitive capacities and domain-specific skills in language comprehension, **Fondation Maison des Sciences de l'homme**, Paris, France, 2008.
- Effects of Age, Working Memory and Speed of Processing on Language Comprehension, Aging and Speech Communication Conference, Bloomington, IN, 2007.

- Sentence comprehension in normal aging and after neuropathology. Invited symposium paper to be presented at the **American Speech and Hearing Association**, Philadelphia, PA., November, 2004.
- A Study of Syntactic Processing in Aphasia I: Behavioral (Psycholinguistic) Aspects, Academy of Aphasia, Chicago, October 2004.
- A Study of Syntactic Processing in Aphasia II: Neurological Aspects, Academy of Aphasia, Chicago, October 2004.
- Specialized verbal working memory for language comprehension. Invited presentation at the conference on **Variation in Working Memory**, University of Illinois at Chicago, August, 2003.
- The Role of Broca's Area in Language Processing. Invited symposium paper presented at the Academy of Aphasia, Santa Fe, AZ., October, 1998.
- How specialized is Working Memory? Evidence from Normals, Brain-damaged patients and Neuroimaging. Colloquium presented at the **Five Colleges Cognitive Science Series**, Amherst, MA., October, 1998
- Fractionation of working memory. Colloquium presented in the Psychology Department, **Concordia University**, Montreal, October, 1998.
- Working memory and sentence comprehension: Evidence from individual differences. Invited presentation at the Sedona conference on Constraints on Language:
   Grammar, Memory and Aging organized by the Virginia and Fred Merrill Advanced Studies Center, March, 1998, Sedona, Az.
- Working Memory and Language Processing. Colloquium presented in the Psychology Department, **Bowdoin College**, Brunswick, ME, March, 1997.
- Evidence for Multiple Working Memory Capacities in Language Comprehension. Invited Symposium paper presented at the **European Workshop on Cognitive Neuropsychology**, Bressanonne, Italy, January, 1996.
- Single or Multiple Working Memory Capacities? Evidence from patients and dual-task studies. Symposium paper presented at the **Psychonomics Society**, Los Angeles, CA., November, 1995.
- Language Processing after Stroke and Dementia. Department of Speech Language Pathology, **Emerson College**, Boston, MA., January, 1994.
- The Nature of the Processing Resource System used in Language Comprehension. Department of Psychology, **Brandeis University**, Waltham, MA., March, 1994.
- What the study of patients tells us about the nature of the processing resource system used in language comprehension. Department of Speech Language Pathology and Audiology, **Northeastern University**, Boston, MA., March, 1994.

- Language and memory in aging and dementia. Instituto di Gerontologia e Geriatria e Clinica Urologica, **Universita di Firenze**, Florence, Italy, May, 1993.
- Short-term memory, processing capacity and language comprehension. Cognitive Science Group, University of Arizona, Tucson, Arizona, March, 1993.
- Processing resources and language comprehension. Psychology Department, University of Lancaster, Lancaster, U.K., December, 1992.
- The role of short-term memory in language comprehension. Psychology Department, University College London, London, U.K, November, 1992.
- Short-term memory, processing capacity and sentence comprehension. Psycholinguistics Lab, **Birkbeck College,** London, U.K., November, 1992.
- Language comprehension in Alzheimer's Disease. MRC Applied Psychology Unit, Cambridge, U.K., November, 1992.
- The acquisition of literacy skills in congenitally deaf children. Behavioral Science Research Group, **The Hospital for Sick Children**, Toronto, Ontario, April, 1991.
- The structure and role of auditory verbal short-term memory. Psychology Department, **Concordia University**, Montreal, April, 1991.
- Processing resources and stages of sentence comprehension in patients with Alzheimer's disease. Psychology Department, **Concordia University**, Montreal, December, 1991.
- Reading acquisition in congenitally deaf children who communicate orally: Insights from an analysis of component reading, language and memory skills. Psychology Department, **McMaster University**, Hamilton, Ontario, April, 1989.
- On the nature and functional role of auditory verbal short-term memory in language comprehension. Centre Hospitalier Cote des Neiges, Laboratoire, Th. Alajouanine, Montreal, Quebec, April, 1989.
- A review of the Neuropsychological case studies on the role of short-term memory in language comprehension. Paper presented as part of an invited symposium at the **Sixth International Congress on Cognitive Neuropsychology**, Bressanone, Italy, January, 1988.
- Component processes in reading and spelling. Neurolinguistics Laboratory, Massachusetts General Hospital, Boston, MA, March, 1988.
- Factors influencing the acquisition of reading and spelling skills. Keynote speaker at Parents and Teachers Conference, Landmark School for Learning Disabled Children, Beverley, MA., March, 1988.
- Short-term memory, language comprehension and apraxia of speech. Neuropsychology Interest Group, **University of Toronto**, Toronto, Ontario, November, 1988.

- The role of short-term memory in automatic and controlled language processing. Paper presented with D. Caplan at a conference on **Neuropsychological Impairments of Short-term Memory**, Como, Italy, September, 1987.
- Component processes in reading and spelling. Psychology Department, **Montreal Neurological Institute**, Montreal, November, 1987.
- The role of the articulatory loop in reading. Psychology Department, **Montreal Neurological Institute**, Montreal, May, 1986.
- Working memory and sentence comprehension. Haskins Research Laboratories, New Haven, Conn., June, 1986.
- Working memory and written sentence comprehension. Paper presented at the meeting of **Attention and Performance XII**, London, England, August, 1986.

### Papers Presented at Conferences

Waters, G.S., Caplan, D., Michaud, J., and Bertram, J. Assessment of reading and listening comprhension in middle and high school students. **Society for the Scientific Study of Reading**, 2010, Berlin, Germany.

- Waters, G.S. and Caplan, D. Factors predicting reading comprehension in middle and high school students. **Institute for Educational Sciences**, 2010, National Harbor, MD
- Caplan, D., Waters, G., DeDe, G. & Michaud, J. Influence of Age, SOP, WM, and vocabulary on syntactic processing. **Cognitive Aging Conference**, 2010, Atlanta, GA.
- Evans, W. S., Waters, G.S., and Caplan, D. On-line interaction of mathematical and syntactic demand: Failure to replicate. **CUNY Sentence Processing Conference**, 2010, New York, NY
- Waters, G.S. and Caplan, D. Determinants of discourse comprehension in middle and high school students. **Institute for Educational Sciences**, 2009, Washington, DC
- Waters, G.S., Caplan, D., & Michaud, J. Factor analysis of reading skills in middle and high school students. **Psychonomic Society**, 2009, Boston, MA
- Caplan, D., DeDe, G., Waters, G.S., & Michaud, J. Age-related changes in comprehension of sentences with relative clauses. **CUNY Sentence Processing Conference**, 2009, Davis, CA
- Caplan, D. and Waters, G.S. Assessment of middle school literacy. Presentation to the **Strategic Education Research Partnership**, 2008, Boston, MA
- Caplan, D., DeDe, G., Waters, G.S., Michaud, J., Gutman, R., & Liu, J. Rasch Models of Aphasic Syntactic Comprehension. **Psychnomic Society**, 2008, Chicago, IL.
- Caplan, D., Waters, G., & DeDe, G. Effects of Age, Working Memory, and Speed of Processing on Complex Syntactic Processing. **Cognitive Aging Conference**, 2008, Atlanta, GA.

- Caplan, D., Waters, G., & DeDe, G. Effects of Age, Working Memory, and Speed of Processing on Satisfied Goal Effects. Cognitive Aging Conference, 2008, Atlanta, GA.
- Caplan, D., Waters, G., & DeDe, G. Effects of Age, Working Memory, and Speed of Processing on Change of Co-Indexation of a Pronoun to an Unenforced Referent in Discourse Processing. **Cognitive Aging Conference**, 2008, Atlanta, GA.
- Caplan, D., Waters, G.S., Michaud, J., & Lee, J.M. BOLD Signal Response to Syntactic and Semantic Variables in Font Change Detection. **CUNY Sentence Processing Conference**, 2008, Chapel Hill, NC.
- DeDe, G., Caplan, D., & Waters, G. Effects of Age, Working Memory, and Speed of Processing on Recovery from Garden Path Effects in Early Closure Sentences. Cognitive Aging Conference, 2008, Atlanta, GA.
- Gould, J., Caplan, D., & Waters, G. The Formation of Elaborative and Bridging Inferences. **Psychnomic Society**, 2008, Chicago, IL.
- McAllister, T., Caplan, D. & Waters, G. Production and Comprehension of Unaccusatives in Aphasia. Clinical Aphasiology Conference, 2008, Jackson Hole, WY.
- Stanczak, L., Caplan, D., Peralmutter, N., & Waters, G. Mechanisms Underlying Lexical and Syntactic Ambiguities. CUNY Sentence Processing Conference, 2008, Chapel Hill, NC.
- Waters, G.S., Caplan, D., & DeDe, G. Effects of Age, Working Memory and Speed of Processing on Syntactic Processing. **Psychnomic Society**, 2008, Chicago, IL.
- Waters, G.S. and Caplan, D. A Linguistic Computer-based Reading Battery. Institute for Educational Sciences, 2008, Washington, D.C.
- Waters, G.S., Caplan, D., & DeDe, G. Effects of Age, Working Memory, and Speed of Processing on the Repeated Name Penalty. **Cognitive Aging Conference**, 2008, Atlanta, GA.
- Waters, G.S., Caplan, D., & DeDe, G. Effects of Age, Working Memory, and Speed of Processing on Syntactic Processing Costs with Relative Clauses. **Cognitive Aging Conference**, 2008, Atlanta, GA.
- Waters, G.S. and Caplan, D. Computerized Psycholinguistic Assessment of Written and Spoken Language Skills in Middle School Students. **Institute for Educational Sciences**, 2007, Washington, D.C.
- Caplan, D., and Waters, G. Task and Strategy Effects in fMRI Studies of Syntactic Processing. European Cognitive Neuroscience Society, 2007, Bressanone, Italy.
- Caplan, D., and Waters, G. BOLD Signal Response to Implicit Syntactic Processing. Cognitive Neuroscience Society, 2007, New York, NY.
- Stanczak, L., Caplan, D., Waters, Babbett, L., Lee, J., Kuperberg, G., & Pearlmutter, N. BOLD Signal Correlates of Semantic Plausibility as a Function of Working Memory and Task Demand. Cognitive Neuroscience Society, 2007, New York, NY.

- Caplan, D., Stanczak, L., & Waters, G.S. Syntactic and Thematic Constraint Effects on BOLD Signal Correlates of Comprehension of Relative Clauses. Academy of Aphasia, 2007, Washington, D.C.
- Caplan, D., and Waters, G. BOLD Signal Response to Implicit Syntactic Processing. **Psychnomic Society**, 2007, Long Beach, CA.
- Stanczak, L., Waters, G., Pearlmutter, N., & Caplan, D. Frequency and Context Cues in Ambiguity Resolution as a Function of Working Memory Capacity. **Psychnomic Society**, 2007, Long Beach, CA.
- Waters, G.S., Caplan, D., & DeDe, G. Age, Working Memory, Speed of Processing and Sentence Processing Proficiency. Cognitive Aging Conference, 2006, Atlanta, GA.
- Waters, G.S. and Caplan, D. The Effect of Age on the Establishment of Pronominal Co-reference in Discourse Processing. **Cognitive Aging Conference**, 2006, Atlanta, GA.
- Caplan, D., Waters, G., Stanczak, L. Effects of Plausibility and Syntactic Structure on BOLD Signal. Cognitive Neuroscience Society, 2006, San Francisco, CA.
- Stanczak, L., Caplan, D., Waters. Differential Costs and Activations During Sentence Comprehension. Cognitive Neuroscience Society, 2006, San Francisco, CA.
- Waters, G.S. Language comprehension in Alzheimer's Disease, Clinical Aphasiology Conference, May, 2005, Sanibel, FL.
- Caplan, D., and Waters, G.S. Sentence Comprehension in Aphasia: Stability of Performance, Clinical Aphasiology Conference, May, 2005, Sanibel, FL.
- Caplan, D., Waters, G., Chen, E., Robakis, D. The Effect of Task on the BOLD Signal Localization of Syntactic Processing. Cognitive Neuroscience Society, March, 2005, New York, NY.
- Caplan, D., Waters, G., DeDe, G., Michaud, J., Reddy, A. Syntactic Processing in Aphasia. Cognitive Neuroscience Society, March, 2005, New York, NY.
- Caplan, D., Waters, G., DeDe, G., Michaud, J., Reddy, A. Syntactic Deficits in Aphasic Comprehension. CUNY Sentence Processing Conference, April, 2005, Tucson, AZ.
- Chen, E., West, C., Waters, G.S., & Caplan, D. Event-related Examination of Animacy Effects on the Localization of Syntactic Processing. Cognitive Neuroscience Society, March 2005, New York, NY.
- Stanczak, L., Caplan, D., Waters, G., Pearlmutter, N. Working Memory and Semantic Plausibility: An fMRI Study. **Boston University Science and Engineering Fair**, 2005, Boston, MA.
- Stanczak, L., Caplan, D., Waters, G. Inhibition of LIFG in Complex Syntactic Processing in Fast Sentence Processors. Cognitive Neuroscience Society, 2005, New York, NY.
- Chen, E., Caplan, D., West, W.C. Event-related examination of animacy effects on the localization of syntactic processing. **Cognitive Neuroscience-Society**, April, 2005, New York, NY.

- Caplan, D., Chen, E., West, W.C. The effect of task on the bold signal localization of syntactic processing. **Cognitive Neuroscience-Society**, April, 2005, New York, NY.
- Stanczak, L., Caplan, D. & Waters, G. Similar and different patterns of activation in fast and slow sentence processors: An FMRI study. Cognitive Neuroscience-Society, April, 2005, New York, NY.
- DeDe, G., Waters, G., Alpert, N. A study of syntactic processing in aphasia. Cognitive Neuroscience-Society, April, 2005, New York, NY.
- Pearlmutter, N., Stanczak, L., Caplan, D. Neural correlates of semantic plausibility in sentence comprehension with high and low working memory groups. Cognitive Neuroscience-Society, April, 2005, New York, NY.
- Stanczak, L., Waters, G., & Caplan, D. Effects of Typicality in single-Word Production, Clinical Aphasiology Conference, May, 2005, Sanibel, FL.
- Waters, G.S., Caplan, D., Gould, J. & Stanczak, L. The repeated name penalty in whole sentence presentation and self-paced reading. Presented at the **Psychonomic Society**, November, 2004, Minneapolis.
- Caplan, D., Waters, G.S., & DeDe, G. Syntactic Processing in Aphasia, Presented at the **Psychonomic Society**, November, 2004, Minneapolis.
- Chen, E., West, C., Waters, G.S., & Caplan, D. BOLD signal correlates of reduced and unreduced relative clauses. Poster to be presented at the **Cognitive Neuroscience Society**, April, 2004, San Francisco, CA.
- Waters, G.S., Caplan, D., Dufault, C., Michaud, J., & Reddy, A. Sentence processing in DAT: Evidence from on-line and off-line tasks. Poster to be presented at the **Cognitive Aging Conference**, April, 2004, Atlanta, GA.
- Parris, D., DeDe, G., & Waters, G.S. Written naming treatment to facilitate verbal naming in chronic aphasia. American Speech-language Hearing Association, November, 2003, Chicago, Illinois.
- Chen, E., Caplan, D., Waters, G.S., & West, C. An event-related fMRI examination of syntactic memory demands in the SO/OS contrast. **Cognitive Neuroscience**, March, 2003, New York, NY.
- DeDe, G., Caplan, D., & Waters, G.S., On-line sentence comprehension in aphasia during sentencepicture matching. Clinical Aphasiology Conference, May, 2003, Orcas Islands, WA.
- Waters, G.S. & Caplan, D., Specialization in working memory for aspects of sentence comprehension. Paper presented at the **Interantional Conference on Short-term Memory**, July, 2002, Quebec, Canada.
- Waters, G.S. & Caplan, D. Working memory and on-line syntactic processing in Alzheimer's disease. Presented at the **World Federation of Neurology**, May 2002, Villefranche sur Mer, France.

- DeDe, G., Parris, D., & Waters, G.S. Teaching Self-Cues: A treatment approach for verbal naming. Paper presented at **Clinicial Aphasiology Conference**, May 2002, Ridgedale, MO..
- Waters, G.S., DeDe, G., & Caplan, D. The structure of verbal working memory in young-young, youngold, and old-old individuals. Poster presented at the **Cognitive Aging Conference**, March, 2002, Atlanta, GA.
- Waters, G.S., & Caplan, D. Working memory capacity and sentence comprehension in young and old individuals and in patients with Alzheimer's disease. Poster presented at the **Cognitive Aging Conference**, March, 2002, Atlanta, GA.
- Caplan, D. & Waters, G.S. The functional neuroanatomy of syntactic processing in sentence comprehension in young and elderly individuals. Cognitive Aging Conference, March, 2002, Atlanta, GA.
- Caplan, D., Waters, G.S., & Stanczak, L. Individual differences in rCBF responses to syntactic processing. Paper presented at the **CUNY Sentence Processing Conference**, 2002.
- Waters, G.S., Caplan, D., & Yampolsky, S. Working memory and on-line syntactic processing. Paper presented at the annual meeting of the **Psychonomics Society**, November, 2001, Orlando, FL.
- Caplan, D., Waters, G.S., & Stanczak, L. Working memory effects on the functional neuroanatomy of syntactic processing. Paper presented at the annual meeting of the **Psychonomics Society**, November, 2001, Orlando, FL.
- Yampolsky, S. & Waters, G.S. Treatment of oral reading in a patient with Acquired Dyslexia. Poster presented at the American Speech and Hearing Association, November, 2000, Washington, D.C.
- Mayberry, R. Waters, G.S., and Chamberlain, C. Word recognition in deaf readers. Paper presented at the **Psychonomics Society**, November, 2000, New Orleans, LA.
- Caplan, D., Waters, G.S., & Alpert, N. Localization of syntactic processing in sentence comprehension. Paper presented at the **Psychonomics Society**, November, 2000, New Orleans, LA.
- Waters, G.S., Caplan, D., & Dufault, C. The relationship between working memory capacity and on-line sentence processing efficiency in patents with DAT. Poster presented at the Academy of Aphasia, November, 2000, Montreal, Quebec.
- Caplan, D., Vijayan, S., Kuperberg, G., West, C., Waters, G., Greve, D., Dale, A. Localization of syntactic processing in sentence comprehension by event-related fMRI. Poster presented at the **Academy of Aphasia**, November, 2000, Montreal, Quebec.
- Waters, G.S., Caplan, D., DeDe, G., & Kemtes, K. The relationship between processing speed, working memory capacity, and language processing in young and elderly subjects. Poster presented at **Cognitive Aging**, March, 2000, Atlanta, GA.
- Waters, G.S., & DeDe, G. The reliability and validity of operation span measures. Poster presented at **Cognitive Aging**, March, 2000, Atlanta, GA.

- Kuperberg, G., Dale, A., Greve, D., Eischl, B., Vijayan, S., Waters, G., Desikan, R., Rauch, S., West, C., Holcomb, P., & Caplan, D. Event-related fMRI reveals distinct patterns of neural modulation during semantic and syntactic processing of sentences. Paper presented at Human Brain Mapping, March, 2000.
- Caplan, D. & Waters, G.S. Functional neuroimaging studies of syntactic comprehension. Paper presented at the **CUNY Conference on Sentence Processing**, April, 2000, LaJolla, CA.
- Waters, G.S., Caplan, D., DeDe, G., & Kemtes, K. Operation span and language processing in young and elderly subjects. Paper presented at the **Psychonomics Society**, November, 1999, Los Angeles, CA.
- Caplan, D. & Waters, G.S. Brain organization for syntactic processing studied with Positron Emission Tomorgraphy, Invited Symposium Paper, Cognitive Neuroscience Society, March, 1999, Washington, D.C.
- Caplan, D., & Waters, G.S. On-line syntactic processing in Aphasia: Studies with Auditory Moving Windows Presentation. Paper presented at the Academy of Aphasia, October, 1999, Venice, Italy.
- Caplan, D., Alpert, N., Waters, G.S., & Oliveri, A. Activation of Broca's area by syntactic processing under conditions of concurrent articulation. **CUNY Conference on Sentence Processing**, March, 1999, New York, NY.
- Caplan, D., Alpert, N.M. & Waters, G.S. Localization of syntactic comprehension by Positron Emission Tomography. Poster presented at the 4th International Conference on Human Brain Mapping, June, 1998, Montreal, Quebec.
- Waters, G.S., Caplan, D. & Pollock, S. The role of articulatory-phonological and lexical semantic factors in short-term memory span. Poster presented at the International Conference on Short-term Memory, June, 1998, Quebec, Quebec.
- Caplan, D. & Waters, G.S. Working memory and on-line sentence comprehension. Poster presented at the **International Conference on Short-term Memory**, June, 1998, Quebec, Quebec.
- Waters, G.S. & Caplan, D. Working memory capacity and language processing in aging. Paper presented at the **Cognitive Aging Conference**, April, 1998, Atlanta, GA.
- Caplan, D. & Waters, G.S. Working memory capacity and on-line sentence processing in Parkinson's disease. Poster presented at the **Cognitive Aging Conference**, April, 1998 Atlanta, GA.
- Caplan, D., Waters, G.S., & Alpert, N. Localization of syntactic processing in sentence comprehension in aging. Poster presented at the Cognitive Aging Conference, April, 1998 Atlanta, GA.
- Caplan, D., Alpert, N., & Waters, G. Brain organization for syntactic processing. Conference on the Languages of the Brain, March, 1998, Paris, France.
- Waters, G.S. & Caplan, D. Working memory capacity and on-line syntactic processing. Paper

presented at the annual meeting of the **Psychonomics Society**, November, 1997, Philadelphia, PA.

- Caplan, D. & Waters, G.S. On-line measures of syntactic processing in aphasic patients. Paper presented at the annual meeting of the **Psychonomics Society**, November, 1997, Philadelphia, PA.
- Waters, G.S. & Caplan, D. The role of working memory in sentence processing: Evidence from Parkinson's disease. Paper presented at the annual meeting of the Academy of Aphasia, October, 1997, Philadelphia, PA.
- Caplan, D., Alpert, N., & Waters. G.S. Effects of syntactic structure and number of propositions on patterns of regional cerebral blood flow. Paper presented at the annual meeting of the **Academy of Aphasia**, October, 1997, Philadelphia, PA.
- Titone, D., Wingfield, A., Caplan, D., Waters, G.S., & Prentice, K. Discourse encoding strategies of right hemisphere damaged patients. Poster presented at the annual meeting of the **Academy of Aphasia**, October, 1997, Philadelphia, PA.
- Waters, G.S. & Caplan, D. Working memory capacity and sentence comprehension in Parkinson's Disease. Poster presented at the annual meeting of the **Psychonomics Society**, Chicago, IL., November, 1996.
- Waters, G.S. & Caplan, D. Syntactic processing in subjects with high and low working memory span. Paper presented at the annual meeting of the **Psychonomics Society**, Los Angeles, CA., November, 1995.
- Caplan, D. & Waters, G.S. Syntactic processing in sentence comprehension under dual-task conditions in aphasic patients. Paper presented at the annual meeting of the **Psychonomics Society**, Los Angeles, CA., November, 1995.
- Caplan, D., Waters, G.S., & Hildebrandt, N. Syntactic determinants of sentence comprehension in aphasic patients in sentence-picture matching tests. Paper presented at the annual meeting of the **Academy of Aphasia**, San Diego, CA, November, 1995.
- Waters, G.S., & Caplan, D. The Psycholinguistic Assessment of Language Battery: Preliminary Data. Paper presented at the **British Aphasiological Society**, York, England, September, 1995.
- Murtha, S., Chertkow, H., Waters, G.S., & Bergman, H. Working memory impairment in Dementia of the Alzheimer's type (DAT): Evidence against a single central executive. Paper presented at the 23rd annual meeting of the **International Neuropsychological Society**, Seattle, Washington, February, 1995.
- Murtha, S., Chertkow, H., Laurent, C. The nonunitary nature of the central executive (CE): Evidence from patients with dementia of the Alzheimer's type (DAT). **Theoretical and Experimental Neuropsychology Conference**, May, 1995, Montreal, Canada.

Waters, G.S., & Caplan, D. The relationship between different measures of working memory

capacity and reading comprehension abilities. Poster presented at the **Psychonomic Society** meeting, St. Louis, MI., November, 1994

- Waters. G.S. & Caplan, D. A separate processing resource system for syntactic processing: evidence from sentence comprehension under dual-task conditions in patients with Dementia of the Alzheimer type. Paper presented at the International Conference on Working Memory, Magdalene College, Cambridge, U.K., July, 1994.
- Waters, G.S. & Caplan, D. Syntactic processing in sentence comprehension under dual-task conditions. Poster presented at the Academy of Aphasia, Boston, Massachusetts, October, 1994.
- Caplan, D. & Waters, G.S. Syntactic processing in sentence comprehension by aphasic patients under dual-task conditions. Paper presented at the Academy of Aphasia, Boston, Massachusetts, October, 1994.
- Waters, G.S. & Caplan, D. Working memory and the comprehension of garden path sentences. Poster presented at the Academy of Aphasia, Tucson, Arizona, October, 1993.
- Rochon, E., Waters, G.S. & Caplan, D. Working memory and sentence comprehension deficits in patients with DAT. Poster presented at Memory in Normal Aging and Dementia, **The Rotman Research Institute of Baycrest Centre**, March, 1993.
- Leonard, C., Orchard, D., Waters, G.S., & Caplan, D. The role of phonology in reading: The case of deep and surface anaphora. Poster presented at the **CUNY Sentence Processing Conference**, March, 1993. Amherst, MA.,
- Rochon, E., Waters, G.S. & Caplan, D Sentence comprehension and dual-task performance as possible indicators of early DAT. Presented at Canadian Psychological Association, May, 1993, Montreal, Canada.
- Waters, G.S., Caplan, D., Rochon, E., & Waters, G. Two stages of sentence comprehension and their impairment in patients with Dementia of the Alzheimer's Type. Paper presented at the **Academy of Aphasia**, October 1992, Toronto, Canada.
- Waters, G.S., Caplan, D., Rochon, E., & Waters, G. Processing resources and stages of sentence comprehension in patients with Alzheimer's disease. Poster presented at Attention: Theoretical and Clinical Perspectives, March, 1992, Toronto, Canada.
- Caplan, D., Hildebrandt, N., & Waters, G.S. Effects of verb selectional restrictions on the construction of syntactic form. Paper presented at the CUNY Sentence Processing Conference, March, 1992.
- Chertkow, H., Hamel, E., Bub, D., Waters, G.S., Meyer, E., Evans, A., & Whitehead, V. Increased anterior cingulate activation during cognitive processing in Alzheimer's disease patients. American Neurological Association, 1992.

- Waters, G.S., Caplan, D., Rochon, E., & Waters, G. Processing resources and stages of sentence comprehension in patients with Alzheimer's disease. Poster presented at Attention: Theoretical and Clinical Perspectives, March, 1992, Toronto, Canada.
- Waters, G.S., Caplan, D., & Rochon, E. Processing resources and sentence comprehension in patients with dementia of the Alzheimer's type. Academy of Aphasia, October, 1991 Rome, Italy.
- Orchard, D., & Waters, G.S. The role of phonology in the comprehension of deep and surface anaphora. **Canadian Association of Speech Language Pathologists and Audiologists,** April, 1991, Montreal, Canada.
- Waters, G.S., & Rochon, E. The relationship between short-term memory and syntactic comprehension in the normal elderly. Paper presented at the meeting of the Canadian Association of Speech Language Pathologists and Audiologists, May, 1990, Vancouver, Canada.
- Rochon, E., & Waters, G.S. Short-term memory and language comprehension in early Alzheimertype dementia. Paper presented at the meeting of the Canadian Association of Speech Language Pathologists and Audiologists, May, 1990, Vancouver, Canada.
- Rochon, E., Waters, G. & Caplan, D. The nature and structure of the auditory verbal Short-term memory system: Insights from patients with apraxia of speech. Paper presented at the Seventh International Congress on Cognitive Neuropsychology, January, 1989, Bressanone, Italy.
- Waters, G.S., Leonard, C., & Caplan, D. The role of phonology in reading: Implications for the presence of a homophone effect in processing sentences with gaps. Paper presented at the annual meeting of the **Eastern Psychological Association**, April, 1989, Boston, Massachusetts.
- Waters, G.S. Reading acquisition in the congenitally deaf: Insights from an analysis of component reading, language, and memory skills. Paper presented at the annual meeting of the **Canadian Association of Speech Language Pathologists and Audiologists**, May, 1989, Toronto, Canada.
- Butler-Hinz, S., & Waters, G.S. The role of visual and linguistic information in spelling in a case of acquired dysgraphia. Poster presented at the annual meeting of the **Canadian Association** of Speech Language Pathologists and Audiologists, May, 1989, Toronto, Canada.
- Waters, G.S., Rochon, E., and Caplan, D. Short-term memory processes in patients with apraxia of speech: Implications for the nature and structure of the auditory verbal short-term memory system. International Conference on Cognitive Neuropsychology, British Psychological Society, Harrogate, England, July, 1989.
- Seidenberg, M.S., and Waters, G.S. A mega-study of single word reading. Paper presented at the meeting of the **Psychonomics Society**, Atlanta, Georgia, November, 1989.
- Waters, G.S. A review of Neuropsychological case studies on the role of short-term memory in language comprehension. Paper presented at the **Sixth International Congress on Cognitive Neuropsychology**, Bressanone, Italy, January, 1988.
- Waters, G.S. & Caplan, D. The role of short-term memory in language comprehension: A

Neuropsychological Case Study. Paper presented at the annual meeting of the **Canadian** Association of Speech Language Pathologists and Audiologists, Banff, Alberta, May, 1988.

- Rochon, E. & Waters, G.S. The role of speech-based information in short-term memory: Implications for patients with motor speech disorders. Paper presented at the annual meeting of the Canadian Association of Speech Language Pathologists and Audiologists, Banff, Alberta, May, 1988.
- Waters, G.S., Caplan, D., & Hildebrandt, N. On the nature and functional role of verbal shortterm memory in sentence comprehension. Paper presented at the annual meeting of the Academy of Aphasia, Montreal, October, 1988.
- Butler, S., Caplan, D., & Waters, G.S. Characteristics of syntactic comprehension deficits following closed-head injury. Poster presented at the annual meeting of the Academy of Aphasia, Montreal, October, 1988.
- Bruck, M. & Waters, G.S. How to explain developmental spelling disabilities. Paper presented at the **Canadian Psychological Association**, Toronto, June, 1987.
- Caplan, D., Hildebrandt, N., and Waters, G.S. The role of the articulatory loop in sentence comprehension. Paper presented at the **Fifth European Workshop on Cognitive Neuropsychology**, Bressanone, Italy, January, 1987.
- Waters, G.S., & Bruck, M. Good and poor spellers use of phonological, orthographic, morphologic, and visual information in spelling. Paper presented at the **Society for Research in Child Development**, Baltimore, April, 1987.
- Mayberry, R. & Waters, G.S. Deaf children's recognition of written words: Is fingerspelling the basis? Paper presented at the **Society for Research in Child Development**, Baltimore, April, 1987.
- Waters, G.S., & Bruck, M. An analysis of the reading and spelling skills of children with significant discrepancies in their reading and spelling abilities. Paper presented at the Third World Congress on Dyslexia, Crete, Greece, July, 1987.
- Caplan, D., & Waters, G.S. The role of short-term memory in automatic and controlled language processing. Paper presented at the conference on Neuropsychological Impairments of Short-term Memory, Como, Italy, 1987.
- Mayberry, R. & Waters, G.S. Children's memory for sign and fingerspelling. Paper presented at a conference on Theoretical Issues in Sign Language Research, Rochester, N.Y., June, 1986.
- Bruck, M., & Waters, G.S. Subtypes of poor spellers: A psychometric study. Paper presented at the **International Neuropsychological Society**, San Diego, February, 1985.
- Waters, G.S., Bruck, M., & Seidenberg, M.S. Do children use similar processes to read and spell words? Paper presented at the **Society for Research in Child Development**, Toronto,

April, 1985.

- Waters, G.S., & Doehring, D.G. Factors related to the reading achievement of orally-trained deaf children. Paper presented at the **International Congress on the Education of the Deaf**, Manchester, England, August, 1985.
- Waters, G.S., & Seidenberg, M.S. Spelling-sound effects in reading: Time course and decision criteria. Paper presented at the **Canadian Psychological Association**, Ottawa, June, 1984.
- Seidenberg, M.S., & Waters, G.S. Pre- and post-lexical loci of context effects in word recognition. Paper presented at the Canadian Psychological Association, Ottawa, June 1984.
- Waters, G.S., Bruck, M., & Seidenberg, M.S. Children's use of spelling-sound information in reading and spelling. Paper presented at the **American Psychological Association**, Toronto, August, 1984.
- Waters, G.S., & Doehring, D.G. Reading skills of orally-trained hearing-impaired children. Paper presented at the **Boston Child Language Conference**, Boston, October, 1984.
- Waters, G.S., Morse, C., & Doehring, D.G. An analysis of the beginning reading skills of hearing and orally-trained hearing-impaired children. Paper presented at the **American Speech and Hearing Association**, San Francisco, November, 1984.
- Waters, G.S., & Seidenberg, M.S. Role of irregular spelling and pronunciation in two reading tasks. Paper presented at the **Eastern Psychological Association**, Philadelphia, March, 1983.
- Waters, G.S., & Seidenberg, M.S. Orthographic and phonological code activation in auditory and visual word recognition in good and poor readers. Paper presented at the American Educational Research Association, Montreal, April, 1983.
- Waters, G.S., & Seidenberg, M.S. Children's and adults' use of spelling-sound correspondences in three reading tasks. Paper presented at the Society for Research in Child Development, Detroit, April, 1983.
- Waters, G.S., Bruck, M., & Seidenberg, M.S. Cognitive processes in reading and spelling. Paper presented at the **Second World Congress on Dyslexia**, Halkidiki, Greece, June, 1983.
- Waters, G.S., Komoda, M.K., & Arbuckle, T.Y. Interference effects on reading: Implications for phonological recoding. Paper presented at the Canadian Psychological Association, Montreal, June, 1982.
- Seidenberg, M.S., Waters, G.S., Barnes, M., & Tanenhaus, M.K. Influence of irregular spelling and pronunciation on word recognition. Paper presented at the **Psychonomic Society**, November, 1982.
- Doehring, D.G., Backman, J., & Waters, G.S. Theoretical models of different types of reading disability. Paper presented at the **International Society for the Study of Behavioral**

Development, Toronto, August, 1981.

- Waters, G.S., Komoda, M.K., & Arbuckle, T.Y. Phonological recoding in reading. Paper presented at the **Eastern Psychological Association**, Hartford, Conn., April, 1980.
- Waters, G.S., & Arbuckle, T.Y. Phonological recoding in reading Chinese. Paper presented at the American Psychological Association, Montreal, Quebec, September, 1980.
- Waters, G.S., & Komoda, M.K. The Word Superiority Effect in fluent and less fluent readers. Paper presented at the **Eastern Psychological Association**, Washington, D.C., March, 1978.