

# LAURA L. CESTNICK

## RESEARCH GOALS

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To understand how sensory and cognitive systems develop and interact to create normal and abnormal reading processes. To develop and test remediation programs for dyslexic populations.

Key words: fMRI, MEG, dyslexia, visual attention, sensory systems, language, children, neurodevelopment, acquired, developmental

## EDUCATION

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Ph.D., Psychology	Macquarie University	Australia	1995-2000
	Mentors: M. Coltheart, J. Jerger, A. Galaburda		
M.Ed.	Brock University	Canada	1993-1995
	Mentor: James Wagner		
B.A., Psychology	McMaster University	Canada	1987-1991

## AWARDS RECEIVED

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Postdoctoral Fellowship CIHR (MRC), held at MEG Lab and Linguistics Department, Massachusetts Institute of Technology, America	2003-2004
Postdoctoral Fellowship CIHR (MRC), held at MGH-NMR, Harvard Med. School	2001-2003
Visiting Researcher Fellowship Stanford University School of Medicine, America	1999
Overseas Postgraduate Research Scholarship DEET (Australia), held at Macquarie University, Australia	1995-1998
Travel Grants, Macquarie University, Australia	1996-1998
Henry Jackman Award, Lieutenant Governor of Ontario, Canada	1995
G. Alan Research Grant Scottish Rite Charitable Foundation, Canada	1993-1994
Travel Grant (Yukon, Canada) Halton Board of Education, Canada	1987

## PROFESSIONAL MEMBERSHIPS

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Cognitive Neuroscience Society	2001-
Society for Neuroscience	2001-
Ontario Psychologists' Association, Canada	1999-
NSW Psychologists' Registration Board, Australia	1996-1998
Phi Delta Kappa	1995-
International Reading Association	1994-

## RESEARCH EXPERIENCE

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**Postdoctoral Fellow** *Brain Imaging (fMRI, MEG) and Dyslexia*  
MGH- NMR, Harvard Medical School; Linguistics M.I.T.  
Mentors: R.Poldrack, A.Galaburda, & A.Marantz 2001-2004

**Postgraduate Dissertations** *Reading and Dyslexia*  
Doctorate at Macquarie University  
Mentors: M. Coltheart, J. Jerger, A. Galaburda 1995-2000  
Master's at Brock University  
Mentor: James Wagner 1993-1995

**Research Psychologist** *Reading Dyslexia, Language Disorders*  
Manly Hospital, Australia 1997-1998

**Research Assistant**  
Macquarie University, Australia 1995-1998  
Brock University, Canada 1993-1995  
McMaster Chedoke Hospital, Canada 1993-1995  
Notre Dame College, America 1992

**Research Consultant**  
Niagara Region Literacy Board, Canada 1993-1994

## CLINICAL EXPERIENCE (NEUROPSYCH./LANGUAGE/READING ASSESSMENTS)

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**Psychological Consultant**  
Dr. A. Silver, Private Practice, Canada 1999-2000  
Upper Grand & Wellington School Boards, Canada 1999-2000

**Psychological Associate**  
Peterborough Civic Hospital, Canada 1999-2000

## CLINICAL EXPERIENCE CONTINUED

### Psychologist

Private Practice, Australia 1996-1999  
Manly Hospital, Australia 1997-1998

### Psychometrist

Reading Clinic, Brock University, Canada 1993-1995  
Chedoke McMaster Hospital, ABI Clinic, Canada 1993-1995

## REVIEWER FOR JOURNALS

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Brain and Language 2002-  
Cognitive Brain Research 2001-

## TEACHING EXPERIENCE

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### Lecturer

*Dyslexia and Reading: neuroscientific approaches*  
Harvard Graduate School of Education, America 2002

*Neuropsychology* (winter term); *Physiological Psychology* (summer term)  
Trent University, Canada 2000

### Guest Speaker

*Dyslexia: 30 years of research*, University of Toronto, Canada 2000

*Cognitive Psychology*, Macquarie University, Australia 1997-1998

*Educating children toward societal awareness and development*  
Phi Delta Kappa, University of Toronto Chapter, Canada 1996

### Seminar Leader

*Psychology*  
Macquarie University, Australia 1996-1998

*Educational Psychology* (fall terms); *Cognitive Psychology* (winter terms);  
*Clinical Assessment of Reading Disorders* (all year)  
Brock University, Canada 1993-1995

## PUBLICATIONS

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### **In Progress**

#### *Journal Articles*

Cestnick L., Galaburda A. (2003). The neurological basis for developmental dyslexia: a review of the literature.

Cestnick, L. (2003). Neglect dyslexia: bridging the acquired and developmental literature.

Cestnick L., Poldrack R., Pare-Blagoev J. et al. (2003). The effects of the FastForward Reading Program on speech perception and reading: an fMRI and behavioural study.

#### *Book*

Dyslexia Research. L. Cestnick (Editor). Nova Science Publishers

### **Published**

#### *Journal Articles*

Galaburda A., Cestnick L. (2003). Developmental Dyslexia (La Dislexia del Desarrollo). *Rev Neurol (Revista de Neurologia)*. Feb.. 36(1): 3-9.

Facoetti A, Cestnick L, Lorusso M, Paganoni P, Umiltà C, Mascetti G, and Zorzi M (2003) Asymmetric orienting of visual attention in phonological dyslexia. *Neuropsychologia* "in press"

Knight D., & Cestnick L. (2002). High and low IQ poor readers: remediation comparisons. *Reading Research Quarterly*. *In press*.

Cestnick L. (2001). Cross-modality temporal processing in phonological dyslexics. *Brain and Cognition*, 46(3), August, 319-325.

Cestnick L., & Jerger J. (2000). Auditory temporal processing and lexical/nonlexical reading in developmental dyslexics. *J Am Acad Audiol* 11, 501-513.

Cestnick L., & Coltheart M. (1999) The relationship between language processing and visual processing in developmental dyslexia. *Cognition*, July 30, 71(3), 231-255.

Cestnick L. (1998). Lyme disease in Australia. *Australian and New Zealand Journal of Public Health, Editorial*, 22(5), 524.

Cestnick L. (1998). Surface dyslexia and other interesting reading patterns: new challenges for theorists. *Brain and Language, Special Edition*, 37(1),

193-196.

Cestnick L. (1998). Does surface dyslexia exist: the answer lies in statistical methods. *Brain and Language, Special Edition*, 37(1), 190-193.

Cestnick L. (1995). Motivation, autonomy and romanticism: educating our children toward societal awareness and development. Kappan. *Award winning paper for contributions to Ontario Education*

*Theses:*

Cestnick L. (1999). Vision, audition and dyslexia. Doctoral Dissertation, Macquarie University, Australia.

Cestnick L. (1995). Improving discourse reading comprehension of adults with brain injuries. Masters Dissertation, Brock University, Canada.

*Published Abstracts:*

Pare-Blagoev J., Cestnick L., Rose T., Clark J., Misra M. , Katzir-Cohen, Hook P., Jones S., Galaburda A., Marantz A., & Poldrack R. (2002). The neural basis of phonological awareness in normal reading children examined using fMRI. *Cognitive Neuroscience Soc. Conf.*, San Francisco.

Cestnick, L. (2002). Multimodal temporal processing in developmental phonological dyslexics. *Cognitive Neuroscience Society Conference*, San Francisco.

Cestnick, L., Coltheart, M. (1998). Auditory temporal processing and lexical/nonlexical reading in developmental dyslexics. *Psychonomics*. Texas.

Coltheart, M, Dufty, D., Cestnick, L., and Bates, T. (1998) The Dual Route Model, *Learning to Read, & Developmental Dyslexia*. *Psychonomics*. Texas.

Coltheart, M, Dufty, D., Cestnick, L., and Bates, T. (1998) The Dual Route Model, *Learning to Read, & Developmental Dyslexia Experimental Psychology Conference*, Hobart, Tasmania, Australia April 24-26.

Knight, D., Cestnick, L. (1997). High and low IQ poor readers: remediation comparisons. *Sydney Postgraduate Conference*. Sydney University, Australia.

Cestnick, L. (1997). Does developmental surface dyslexia exist: the answer lies in statistical methods. *Tennet*. Montreal.

Cestnick, L. (1997). Surface dyslexia and other interesting reading patterns. *Tennet*. Montreal.

Cestnick, L., Wagner J. (1996). Art of the chart: improving discourse reading comprehension of adults with brain injuries. *International Congress of Psychology*. Montreal

Cestnick, L. (1996). Diagnosing developmental dyslexics. *Tennet*. Montreal

Cestnick, L. (1996). Discourse reading comprehension in adults with brain injuries. Sydney Postgraduate Conference. Sydney University, Australia.

Cestnick, L., Wagner, J. (1995). Learning tools for adults with severe learning deficits. International Congress of Psychology (Education Chapter). Montreal

## **VOLUNTEER SERVICES IN CHILD EDUCATION**

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*Assessment and Instruction of Reading (psychometric, language and reading assessments)*  
Arlington School Department, Special Education Division 2002-

*Teaching Neuroscience and what it is like to be a neuroscientist, to children.*  
Garfield School, via Citizen Schools in Boston, MA 2001

*Reading instruction with children in an after-school program.*  
Halton Board of Education, Ontario, Canada 1999-2000

*Consultant for a children's learning center (children with serious educational/developmental delay reside on the premise and receive full-on care and instruction 24 hours a day for 8 weeks) Dalwood School, Queenscliff Rehabilitation Center, Sydney, Australia 1997-1998*

## **COMPUTER SKILLS RELEVANT TO RESEARCH**

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SPSS, Psyscope for fMRI/MEG, DMDX, MacroMedia, HTML code