

**Benjamin M. Faber**  
**Curriculum Vitae**

**Contact Information**

Benjamin M. Faber  
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**Education**

Ph.D.           University of Rochester, April 2008 (expected)  
Brain and Cognitive Sciences and Linguistics  
Advisor: Elissa L. Newport

MA             University of Rochester, January 2005 and September 2007  
Brain and Cognitive Sciences and Linguistics

BA             University of California at Santa Cruz, 2000  
Psychobiology (Honors), Linguistics (Honors),  
Kresge College (Honors)

**Honors and Awards**

Graduate Fellowship, University of Rochester, 2002-2005  
Robert and Mary Sproull Fellowship, University of Rochester, 2000-2002  
NSF REU Fellowship, University of North Dakota, 1999  
NSF REU Fellowship, CNBC, University of Pittsburgh / Carnegie Mellon, 1998

### **Teaching interests**

Cognitive psychology  
Developmental psychology  
Development of Mind and Brain  
Language Acquisition and Development  
Language and the Brain  
Statistics  
Research Methods  
Animal Minds  
Psychobiology  
Psycholinguistics

### **Teaching Experience as Full Instructor:**

#### **Instructor, Animal Minds**

Fall 2007, University of Rochester, Enrollment 126

*An elective course that attempts to explore the cognition and mental states of a wide variety of animals using a cognitive science approach. Topics include Navigation, Number, Tool use, Theory of mind, Communication and language, and Consciousness.*

#### **Instructor, Experimental Design and Statistical Analysis Laboratory**

Fall 2007, University of Rochester, Enrollment 90

*Laboratory based statistics course that accompanies a statistical lecture course. The laboratory covers statistics from a functional perspective focusing on understanding the implementation of statistical tests and concepts using SPSS. Responsibilities included devising lab assignments, teaching three sections of laboratory lectures, and one-on-one assistance of students using SPSS. Topics include Probability, Chi-square, t-tests, Correlation and Regression, and ANOVA.*

#### **Instructor, Cognitive Foundations Graduate seminar**

Fall 2007, University of Rochester, Enrollment 12

*A seminar for Clinical Psychology PhD students on Cognitive Psychology. Topics included History of Cognitive Science, Memory, Concept and categories, Language, Judgment and Decision making.*

#### **Instructor, Cognitive Psychology**

Summer 2007, University of Rochester, Enrollment 8

*An introduction to cognitive psychology/cognitive science. Surveying Concepts and categories, Attention, Memory, Language and Higher cognitive processes.*

#### **Instructor, Language Development**

Spring 2007, University of Rochester, Enrollment 52

*An upper level seminar on the developmental progression of language acquisition. Topics include Phonology, Speech Perception and Production, Morphology and Syntax, Pragmatics and Discourse, Brain and Language, Critical Periods, Special Populations, and Bilingualism.*

Instructor, Development of Mind and Brain

Spring 2007, University of Rochester, Enrollment 74

*Introduces human development, focusing on the ability to perceive objects and sounds, to think and reason, and to learn and remember language and other significant patterned stimulation. Includes the nature and mechanisms of development in humans and an overview of what is known about brain and behavioral development in other species.*

Instructor, Laboratory in Development and Learning

Fall 2006, University of Rochester, Enrollment 22

*A research seminar and laboratory course teaching students how to design, perform, and analyze a developmental psychology study of infants or young children. The course requires students to learn and use the APA format and write a publication quality research paper on their work.*

Instructor, Animal Minds

Fall 2006, University of Rochester, Enrollment 86

*See above.*

Instructor, Cognitive Psychology

Summer 2006, University of Rochester, Enrollment 4

*See above.*

Instructor, Language Development

Spring 2006, University of Rochester, Enrollment 45

*See above.*

Instructor, Animal Minds

Fall 2005, University of Rochester, Enrollment 70

*See above for description.*

Instructor, Cognitive Psychology

Summer 2005, University of Rochester, Enrollment 10

*See above for description.*

Instructor, Cognitive Foundations Graduate seminar

Spring 2005, University of Rochester, Enrollment 14

*See above for description.*

Instructor, Cognitive Psychology

Summer 2004, University of Rochester, Enrollment 4

*See above for description.*

**Teaching Experience as Teaching Assistant**

Lab Instructor and Teaching Assistant, Experimental Design and Statistical Analysis,  
Fall 2002, 2003, 2004, 2005. University of Rochester, Enrollment 35-95.

*See above for description. TA duties included 1-2 weekly computer lab sessions, laboratory lectures, and running extensive review sessions.*

Teaching Assistant, Cognitive Psychology,  
Spring 2002, University of Rochester,

*See above for description.*

**Scheduled future teaching:**

Instructor, Language Development

Spring 2008, University of Rochester, Expected Enrollment 40-60

*See above.*

Instructor, Cognitive Psychology

Spring 2008, University of Rochester, Expected Enrollment 100-150

*See above.*

Instructor, Language and the Brain

Spring 2008, University of Rochester, Expected Enrollment 15-20

*Advanced seminar that examines how the comprehension and production of language is implemented in the human brain. Uses evidence from neuropsychological and brain imaging studies.*

## Research Interests

The development of learning abilities underlying the cognition of hierarchical structures.  
Complex emergent behaviors.  
Statistical Language learning.  
The interaction between theoretical linguistics and empirical psycholinguistics.  
Animal cognition and the evolution of human cognitive abilities.

## Research Experience

- 2004 - Doctoral Research Part II: The interaction of statistical regularities and semantic dependency in the acquisition of hierarchical phrase structure.  
2007  
A set of studies of what cues are necessary to learn a complex hierarchical structure from miniature languages.  
*Department of Brain and Cognitive Sciences*  
*University of Rochester. Supervisor: Elissa L. Newport, Ph.D.*
- 2000 – Doctoral Research Part I: Flexibility in learning phrase structures from statistical information.  
2003  
A set of studies exploring the limits of statistical information and acquisition of phrase structures from miniature languages.  
*Department of Brain and Cognitive Sciences*  
*University of Rochester. Supervisor: Elissa L. Newport, Ph.D.*
- 1999 Research Project: Evolutionary algorithms for building neural networks:  
A study of how small network models can solve sequential learning tasks with long term working memory.  
*Department of Computer Science*  
*University of North Dakota. Supervisor: Sven Anderson, Ph.D.*
- 1998 Research Project: The rehearsal loop in working memory - Articulatory or Acoustic:  
A study of what phonetic features effect working memory recall span.  
*Center for the Neural Basis of Cognition*  
*University of Pittsburgh. Supervisor: Julie Fiez, Ph.D.*

## References

Dr. Elissa Newport  
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