## Award ID: 0801465 Project Characteristics

PI: Phillips, Colin - Reporting Year: 2009

#### **NSF** directorates:

Biological Sciences Computer and Information Science and Engineering Social, Behavioral, and Economic Sciences

Did you support any IGERT trainees during the current project year?

Yes

Considering the IGERT trainees as a group, how do they compare with graduate students you usually see in terms of their academic/research potential?

Somewhat better than our usual graduate students

#### How do trainees in your program earn their doctoral degrees?

Trainees earn their degrees from traditional single-discipline departments.

Trainees earn their degrees from multidisciplinary/interdisciplinary programs, centers, or units other than IGERT.

Other (certificates, etc.): Neuroscience & Cognitive Science Certificate Program

Does your IGERT project include undergraduate involvement?

No

Does your IGERT project include postdoctoral involvement?

No

Indicate the amount of funds from the current year of IGERT support that will be carried over to the next year.

Total funds carried over to the next year: 273203

Participant support costs carried over to the next year: 86378

Stipends carried over to the next year: 43561

## Award ID: 0801465 Research Achievements PI: Phillips, Colin - Reporting Year: 2009

#### First achievement:

A team of IGERT participants is developing a provocative new approach to the problem of how children might learn to identify sound alternations and the relations between the surface allophones of individual abstract phonemes by drawing on a combination of techniques from machine learning (Computer Science), early language learning (Psychology/Linguistics) and language diversity (Linguistics). In contrast to standard approaches that first learn surface phonetic categories and then the more abstract phonological categories, the team has arrived at the surprising result that more robust learning is achieved by directly learning the abstract categories from the uncategorized speech corpora.

#### **Second achievement:**

A team of IGERT participants from Psychology and Linguistics has created a new facility for eye-tracking research on language comprehension. This collaboration has generated a suite of

new research projects and new cross-departmental intellectual connections, and it has strengthened ties with the Center for Advanced Study of Language, a campus-affiliated federal research laboratory. These new connections have produced new projects at the intersection of memory and language research. This research is testing claims that have received much media attention on the role of simple memory training exercises on broad cognitive abilities. The new research has also highlighted that insights from decision theory may resolve current controversies on the role of expectations in guiding language comprehension.

#### Third achievement:

A cross-disciplinary research group on ?critical periods? in language development was formed as a part of our program?s intensive 2-week Winter Storm workshop, bringing together students from Second Language Acquisition, Linguistics, Computer Science, Psychology, and Hearing & Speech Sciences. The discussions during the workshop were so productive that the group continued to meet regularly over the subsequent months. The outcome of this activity is a new research effort that uses neuro-computational modeling to better understand the neurocognitive basis for children?s advantage over adults in language learning. This outcome is noteworthy due to the limited connections in past research between computer science, the psychology of memory, and second language acquisition.

## Award ID: 0801465 Education Achievements PI: Phillips, Colin - Reporting Year: 2009

#### First achievement:

The IGERT program organized the first of its annual 'Winter Storm' intensive 2-week workshops in January 2009, before the start of the UM spring semester. Winter Storm ran from 9am-4pm every day, with activities that included mini-courses, interdisciplinary research focus groups, research talks by faculty, and hands-on skills workshops. Almost all activities were substantially student led. Around 30 students and faculty participated. A particularly well-received component of Winter Storm was a course on the data analysis environment 'R', which met every morning and was led primarily by a pair of students in the IGERT program (Pedro Alcocer and Brian Dillon). It was highly beneficial for student participants and student instructors alike. It served as a catalyst for new interaction between students, and helped to create common ground for students who are otherwise working on quite different problems. This course serves as a model for similar events in future years.

#### **Second achievement:**

An outreach event that the IGERT program organized for the benefit of high school students turned out to also have strong educational benefits for participating graduate students. Students took the lead in planning and delivering a series of hands-on activities for 80 AP-Psychology students from Northwood High School, a nearby high school that serves a very diverse population (around 70% minorities). The event was a great success for the graduate students and the high school students alike. The benefits for the graduate students were that they worked together in interdisciplinary groups, and that they designed activities that were suitable for conveying their research interests to a group of non-specialists, a skill that is essential for anybody who works in a diverse academic or research setting.

#### Third achievement:

Award ID: 0801465

# Trainee Achievements PI: Phillips, Colin - Reporting Year: 2009

#### First achievement:

Annie Gagliardi is pursuing an ambitious project that combines laboratory work, fieldwork, and computational modeling. She uses children's learning of noun classes as a model system for understanding how children form categories and draw inferences in learning. Gagliardi?s fieldwork involved 2 months in Dagestan with child and adult speakers of Tsez, a language with a rich noun class system spoken by only a few thousand speakers. Her work in the US combines laboratory studies of language learning with infants and adults, and computational models of learning, and she was a 2009 winner of an NSF Graduate Research Fellowship. This work has already generated a new corpus of adult-child interactions in Tsez, and experimental findings that show differences in how child and adult speakers form generalizations about noun categories. In addition, Gagliardi?s presence in the community stimulated the speakers? interest in their own language and in advanced education for women.

#### **Second achievement:**

Sunyoung Lee-Ellis is an IGERT student from the Second Language Acquisition program who has worked across departments to develop an innovative research program on Heritage Language Speakers. These are speakers whose first language (typically the language of their immigrant parents) is no longer their dominant language. This group provides a valuable natural laboratory for distinguishing the roles of early experience vs. amount of experience in language learning, factors that are typically confounded. Results from cross-language speech perception studies challenge the common view that early experience is paramount. Some perceptual abilities are most dependent on early experience in a language, whereas others are more dependent on the amount of experience in a language.

#### Third achievement:

Joshua Riley has worked with patients with the rare condition of 'Foreign Accent Syndrome', through a collaboration between UM and researchers at the National Institutes of Health. His work has involved a combination of detailed behavioral tests and structural and functional neuroimaging measures. This work has uncovered network-level abnormalities in the brains of patients with Foreign Accent Syndrome.

Award ID: 0801465
Barriers to Implementation
PI: Phillips, Colin - Reporting Year: 2009

#### First Barrier

#### Issue/challenge:

We did not sufficiently appreciate the demands of setting up the large number of activities associated with an IGERT program, and our progress was slowed by limited staff support. Staff support was secured for initial implementation of technical aspects of the program, and great progress was made in this area, but the PI underestimated the extent of day-to-day communication and administrative demands. He also did not anticipate the list of additional requests on his time that came with receiving an IGERT award, such as giving presentations to campus groups, lending support to new interdisciplinary initiatives, etc. This was exacerbated by the departure of a key departmental administrator shortly after the start of the IGERT project.

#### **Response:**

A number of straightforward measures are being taken to address this barrier. An administrative staff person will be hired in the near future. The PI has received useful input from PIs of other IGERT programs on how to maximally benefit from this additional staff support. The PI's home department will relieve him of some significant additional administrative responsibilities that he has held since before the IGERT program started. As the program becomes more established, a broader set of individuals are assuming leadership roles in different aspects of the program.

#### **Second Barrier**

#### Issue/challenge:

A key goal of our IGERT program is that the experience of individual trainees should more broadly impact other graduate students in their home departments. This is essential if the program is to be sustainable and if it is to effect long-term institutional change. We have found that the infrastructure of individual participating programs affects the impact that individual trainees have. In one department, where graduate students have good lab space and many opportunities to communicate on a day-to-day basis, the impacts from a single IGERT participant have been unexpectedly positive, and some best practices from the IGERT program have already spread to the student's home department. In another department, where graduate facilities are less good and channels of communication correspondingly weaker, the IGERT program has greatly benefited an individual trainee, but we have been disappointed by the broader impacts of this on the student's program.

#### **Response:**

In order to address this concern, we are making efforts to increase the visibility of the program in different departments, we are changing our procedures for communicating to participating departments, and we are working to secure improved facilities for students in certain participating departments, in order to allow our investments to have a broader impact.

#### **Third Barrier**

#### Issue/challenge:

All PIs of successful IGERT programs that we have spoken with have emphasized the same thing: the success of the program depends on broad buy-in from participating students. We have seen this very clearly in the first year of the program: the most successful events are those where students have a good understanding and commitment to the goals of the event, and an understanding of what to expect.

#### **Response:**

We are taking this lesson to heart, and seeking to have student leadership in almost all of the program's activities, including planning of meetings, development of the program assessment plan, development of interdisciplinary symposia, and documentation of the program's activities.

Award ID: 0801465 Outreach Activities PI: Phillips, Colin - Reporting Year: 2009

#### **Outreach Activity 1**

Title:

High School Field Trip

Name of media outlet or organization for which outreach was done:

Northwood High School, Silver Spring, MD

Date of activity:

04/13/2009

# Briefly describe this activity, including the type of the activity and the names of individuals within IGERT who were involved:

15 IGERT participants led a series of hands-on activities for 80 AP-psychology students from Northwood High School, a local school with a very diverse student body.

#### **Outreach Activity 2**

Title:

Maryland Day Community Outreach

Name of media outlet or organization for which outreach was done:

General Public

Date of activity:

04/25/2009

Briefly describe this activity, including the type of the activity and the names of individuals within IGERT who were involved:

Students and faculty from the IGERT's group on early language development had a tent and research display at UM's annual Maryland Day, an event that brought 70,000 community members to the campus.

#### **Outreach Activity 3**

Title:

Russian media reports

Name of media outlet or organization for which outreach was done:

Russian newspapers

**Date of activity:** 

07/31/2008

Briefly describe this activity, including the type of the activity and the names of individuals within IGERT who were involved:

IGERT trainee Annie Gagliardi's fieldwork with children learning the minority language Tsez in Dagestan was featured in two Russian-language newspapers.

#### **Outreach Activity 4**

Title:

University media report on High School event

Name of media outlet or organization for which outreach was done:

University of Maryland

Date of activity:

04/16/2009

Briefly describe this activity, including the type of the activity and the names of individuals within IGERT who were involved:

The IGERT program's high school outreach event was featured in the U of Maryland's "Between the Columns" newsletter, which is distributed to around 10,000 faculty and staff.

#### **Outreach Activity 5**

Title:

University media reports on IGERT program

Name of media outlet or organization for which outreach was done:

University of Maryland

Date of activity:

11/05/2008

Briefly describe this activity, including the type of the activity and the names of individuals within IGERT who were involved:

The U of Maryland news office issued two reports on the IGERT program and its activities.

## Award ID: 0801465 NSF Highlights

PI: Phillips, Colin - Reporting Year: 2009

#### **NSF Highlights 1**

Title:

Fieldwork on child language learning in Dagestan

## **Primary Strategic Goal:**

Learning: Cultivate a world-class, broadly inclusive science and engineering workforce and expand the scientific literacy of all citizens.

#### **Secondary Strategic Goal:**

Discovery: Foster research that will advance the frontiers of knowledge, emphasizing areas of greatest opportunity and potential benefit and establishing the Nation as a global leader in fundamental transformational science and engineering.

#### Describe the achievement / result that is the Highlight:

Graduate student Annie Gagliardi and her collaborators are working with children in remote villages in Dagestan in an effort to unlock the mysteries of why children are such successful language learners. Gagliardi is a trainee in the University of Maryland's new program on "Biological and Computational Foundations of Language Diversity", which is supported by NSF's Integrative Graduate Education and Research Traineeship (IGERT) program. Gagliardi is focusing on the processes that allow children to learn how their language organizes nouns into different classes. Languages categorize words in many different ways, ranging from one class (as in English) to as many as thirteen classes, and the classification may be based on gender (as in Spanish) or biological properties (e.g., animals), shapes, the sound of the word, or the classification may be arbitrary. Noun classes often determine the form of other words in a sentence, such as adjectives or verbs. Gagliardi and her collaborators are integrating research techniques from linguistics, machine learning and developmental psychology in order to identify the cognitive mechanisms that underlie these categories. This research takes advantage of several research traditions. Traditional linguistics has typically focused on identifying features relevant to classification by describing the vocabulary items in various languages and looking for commonalities across them. Traditional psychology has typically explored categorization mechanisms through behavioral experiments on the categorization of artificial stimuli. Traditional computer science has been focused on engineering tools for finding classes, using computational modeling to extract information from large corpora. While each approach

has made valuable contributions within its own field, these results have generally not been linked together to inform the broader goal: learning how categories are discovered and learned by children presented with a system dependent on categorization. Under the IGERT program, collaboration between linguists, psycholinguists and computer scientists is encouraged, enabling new integration of the traditional approaches by combining methods to identify how human learners create classes. The investigation centers on Tsez, a Nakh-Dagestanian language spoken in the northeast Caucasus. This language was chosen because of its system of 4 noun classes and the fact that is it still being acquired as a first language by children. As a first step, Gagliardi has collected a large sample of naturalistic speech to children. Because this information forms the input to the learning mechanism, it is important to fully characterize it. Second, she has employed computational models to determine the informativity of various cues to categories, using the naturalistic data as input to the model. Third, she has evaluated the predictions of the model by investigating childrens? and adults? sensitivity to these cues using behavioral experiments.

## How does this activity address the primary and secondary NSF Strategic Goals you indicated above?

The research is preparing graduate student Annie Gagliardi to be a uniquely well trained interdisciplinary scientist, who can draw upon tools from linguistics, psychology, and computer science to address questions that cannot be solved using the tools of an individual discipline. The research promises to significantly advance our understanding of how children form categories and use category information to draw inferences, both are key features of human language learning.

**Images Uploaded** 

**Image 1 information** 

**Image Title:** 

Annie Gagliardi with Tsez-speaking children

Does NSF have permission to use this image? Yes

**Image credits:** 

Ann Gagliardi

**Description of image:** 

## Award ID: 0801465 Principal Investigator Information Reporting Year: 2009

Principal Investigator: Name: Phillips, Colin

**Project Years Active: 2008-2009** 

**Contact Information:** 

**Institution:** University of Maryland - College Park

**Department:** Linguistics

**Address:** 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-3082 **Ext:** 

Fax Number: 301-405-7104 Email: colin@umd.edu

Web URL: http://www.ling.umd.edu/colin

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Permanent Resident

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

Co-Principal Investigator/Advisor:

Name: de Keyser, Robert

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Second Language Acquisition

Address: 3215 Jimenez Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-4030 **Ext:** 

Fax Number: 301-405-9752

Email: rdk@umd.edu

Web URL: http://www.languages.umd.edu/SLAA/rdk.html

**Demographic Information:** 

Ethnicity: Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Permanent Resident

Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009 Co-Principal Investigator/Advisor:

Name: Dougherty, Michael

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Psychology

Address: 1145B Biology-Psychology

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-8423 **Ext:** 

Fax Number: 301-314-9566

Email: mdougherty@psyc.umd.edu

Web URL: http://www.bsos.umd.edu/psyc/dougherty/`

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

Co-Principal Investigator/Advisor:

Name: Hornstein, Norbert

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Linguistics

Address: 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-4932 Ext:** 

Fax Number: 301-405-7104 Email: nhornste@umd.edu

**Web URL:** http://www.ling.umd.edu/~hornstein/

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Permanent Resident

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

**Co-Principal Investigator/Advisor:** 

Name: Idsardi, William

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Linguistics

Address: 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-8376 **Ext:** 

**Fax Number:** 301-405-7104 **Email:** idsardi@umd.edu

Web URL: http://www.ling.umd.edu/~idsardi

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

**Co-Principal Investigator/Advisor:** 

Name: Jiang, Nan

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Second Language Acquisition

Address: 4117 Jimenez Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-1378 **Ext:** 

**Fax Number:** 301-405-9928 **Email:** njiang@umd.edu

Web URL: http://www.languages.umd.edu/SLAA/faculty.htm

**Demographic Information:** 

Ethnicity: Not Hispanic or Latino

Race: Asian
Gender: Male
Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

#### Co-Principal Investigator/Advisor:

Name: Lidz, Jeffrey

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor Co-Principal Investigator

**Contact Information:** 

Institution: University of Maryland

**Department:** Linguistics

Address: 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-8220 **Ext:** 

**Fax Number:** 301-405-7104

Email: jlidz@umd.edu

**Web URL:** http://www.ling.umd.edu/~jlidz/

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

**Co-Principal Investigator/Advisor:** 

Name: Long, Michael

**Project Years Active: 2008-2009** 

Role in Project: Co-Principal Investigator

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Second Language Acquisition

Address: 1105C Jimenez Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-6464 Ext:** 

Fax Number: 301-314-9928 Email: mlong5@umd.edu

Web URL: http://www.languages.umd.edu/SLAA/mlong.html

**Demographic Information:** 

Ethnicity: Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Permanent Resident

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

#### Co-Principal Investigator/Advisor:

Name: Newman, Rochelle

**Project Years Active: 2008-2009** 

**Role in Project:** Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Hearing & Speech Sciences

Address: 0141BB Lefrak Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-4226 **Ext:** 

**Fax Number:** 301-314-2023 **Email:** rnewman@hesp.umd.edu

Web URL: http://www.bsos.umd.edu/hesp/facultyStaff/newmanr.htm

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Female Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

Co-Principal Investigator/Advisor:

Name: Novick, Jared

**Project Years Active: 2008-2009** 

**Role in Project:** Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Center for Advanced Study of Language

Address: CASL, Box 25

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-226-8841 Ext:** 

Fax Number: 301-226-8811 Email: jnovick@casl.umd.edu

Web URL: http://www.casl.umd.edu/talent/PeopleProjects.cfm?people\_id=261

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Citizen/U.S. National

Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009 Co-Principal Investigator/Advisor:

Name: Reggia, James

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland **Department:** Computer Science

Address: 3233 AV Williams Building

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-2686 Ext:** 

Fax Number: 301-405-6707 Email: reggia@cs.umd.edu

Web URL: http://www.cs.umd.edu/~reggia/

**Demographic Information:** 

Ethnicity: Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

Co-Principal Investigator/Advisor:

Name: Resnik, Philip

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Linguistics

**Address:** 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-6760 Ext:** 

**Fax Number:** 301-405-7104

Email: resnik@umd.edu

**Web URL:** http://www.umiacs.umd.edu/~resnik/

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Male Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

Co-Principal Investigator/Advisor:

Name: Shah, Yasmeen

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Hearing & Speech Sciences

Address: 0141F Lefrak Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-4229 Ext:** 

**Fax Number:** 301-314-2023 **Email:** yshah@hesp.umd.edu

Web URL: http://www.bsos.umd.edu/hesp/facultyStaff/shahy.htm

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: Asian
Gender: Female
Disability: None

Citizenship: U.S. Permanent Resident

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

**Co-Principal Investigator/Advisor:** 

Name: Shamma, Shihab

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Electrical and Computer Engineering

Address: 2203 AV Williams Building

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-6842 Ext:** 

**Fax Number:** 301-314-9220

Email: sas@umd.edu

Web URL: http://www.isr.umd.edu/faculty/gateways/shamma.htm

**Demographic Information:** 

Ethnicity: Not Hispanic or Latino

Race: Asian
Gender: Male
Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

Co-Principal Investigator/Advisor:

Name: Weinberg, Amy

**Project Years Active: 2008-2009** 

Role in Project: Co-Principal Investigator

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Linguistics, Computer Science

Address: 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-4934 **Ext:** 

Fax Number: 301-405-7104

Email: weinberg@umiacs.umd.edu

Web URL: http://www.umiacs.umd.edu/~weinberg/

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Female Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

**Co-Principal Investigator/Advisor:** 

Name: Woodward, Amanda

**Project Years Active: 2008-2009** 

**Role in Project:** Co-Principal Investigator

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Psychology

Address: 2147B Biology-Psychology

City: College Park

State: MD Zip Code: 20742

**Phone Number:** 301-405-1258 **Ext:** 

Fax Number: 301-405-5914

Email: awoodward@psyc.umd.edu

Web URL: http://www.bsos.umd.edu/psyc/woodward/

**Demographic Information:** 

Ethnicity: Not Hispanic or Latino

Race: White Gender: Female Disability: None

Citizenship: U.S. Citizen/U.S. National

## Award ID: 0801465 Co-Principal Investigator/Advisor Information Reporting Year: 2009

**Co-Principal Investigator/Advisor:** 

Name: Zukowski, Andrea

**Project Years Active: 2008-2009** 

Role in Project: Trainee/Associate Advisor

**Contact Information:** 

**Institution:** University of Maryland

**Department:** Linguistics

Address: 1401 Marie Mount Hall

City: College Park

State: MD Zip Code: 20742

**Phone Number: 301-405-5388 Ext:** 

Fax Number: 301-405-7104 Email: zukowski@umd.edu

Web URL: http://www.ling.umd.edu/~zukowski/

**Demographic Information:** 

**Ethnicity:** Not Hispanic or Latino

Race: White Gender: Female Disability: None

Citizenship: U.S. Citizen/U.S. National

Award ID: 0801465 Trainee Information Reporting Year: 2009

Trainee Information:
Name: Donaldson, Kevin
Funding Status: Funded

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period?

Funding data:

2008-2009 Project Year -Trainee supported for 10 months

Current IGERT Advisor(s): (Reported by trainee) – Shihab Shamma, William Idsardi

Citizenship/Residency Status:

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Trainees:** 

First enrolled in graduate study in an IGERT department: 08/2006

First began receiving NSF-IGERT funding: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Trainee Information **Reporting Year: 2009** 

**Trainee Information:** 

Name: Gagliardi, Ann Funding Status: Funded

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period?

**Funding data:** 

2008-2009 Project Year – Trainee supported for 10 months

Current IGERT Advisor(s): (Reported by trainee) – Jeffrey Lidz, Philip Resnik

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Trainees:** 

First enrolled in graduate study in an IGERT department: 08/2007

First began receiving NSF-IGERT funding: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Trainee Information Reporting Year: 2009

**Trainee Information:** 

Name: Lee-Ellis, Sunyoung Funding Status: Funded

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period?

**Funding data:** 

2008-2009 Project Year – Trainee supported for 10 months

Current IGERT Advisor(s): (Reported by trainee) – Andrea Zukowski, Colin Phillips,

Jeffrey Lidz, Nan Jiang, Robert de Keyser, William Idsardi

Citizenship/Residency Status:

U.S. Permanent Resident

**GRE Scores:** 

Verbal:

Quantitative:

Analytical: Subject Score: **GRE Subject:** 

**IGERT Trainees:** 

First enrolled in graduate study in an IGERT department: 08/2006

First began receiving NSF-IGERT funding: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Trainee Information Reporting Year: 2009

Trainee Information:
Name: Monner, Derek
Funding Status: Funded

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period?

Funding data:

2008-2009 Project Year – Trainee supported for 10 months

**Current IGERT Advisor(s):** (Reported by trainee) – James Reggia

Citizenship/Residency Status:

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical:

Subject Score:

**GRE Subject:** 

**IGERT Trainees:** 

First enrolled in graduate study in an IGERT department: 08/2006

First began receiving NSF-IGERT funding: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Trainee Information Reporting Year: 2009

**Trainee Information:** 

Name: Riley, Joshua Funding Status: Funded

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period?

**Funding data:** 

2008-2009 Project Year – Trainee supported for 10 months

**Current IGERT Advisor(s):** (Reported by trainee) – William Idsardi

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Trainees:** 

First enrolled in graduate study in an IGERT department: 08/2006

First began receiving NSF-IGERT funding: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Alcocer, Pedro

Has the student been engaged in IGERT activities, research, education, or training during this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

**Current IGERT Advisor(s):** (Reported by associate) – Colin Phillips, William Idsardi

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2007

First participated in the IGERT project: 08/2008

#### **Current Situation:**

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Chow, Wing Yee

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

Current IGERT Advisor(s): (Reported by associate) – Colin Phillips, Nan Jiang

Citizenship/Residency Status:

Other Non-U.S. Citizen

**GRE Scores:** 

Verbal:

Quantitative:

Analytical:

Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2008

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Dillon, Brian

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

Current IGERT Advisor(s): (Reported by associate) – Colin Phillips, William Idsardi

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National **GRE Scores**:

Verbal: Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2007

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Dunbar, Ewan

Has the student been engaged in IGERT activities, research, education, or training during this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

**Current IGERT Advisor(s):** (Reported by associate) – William Idsardi

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

GRE Subject:

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2008

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009 **Associate Information:** 

Name: Hoerner, Shannon

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

**Current IGERT Advisor(s):** (Reported by associate) – William Idsardi

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2007

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Hussey, Erika

Has the student been engaged in IGERT activities, research, education, or training during this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

**Current IGERT Advisor(s):** (Reported by associate) – Jared Novick, Michael Dougherty

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical: Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2007

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Kush, Dave

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

Current IGERT Advisor(s): (Reported by associate) – Colin Phillips, Jeffrey Lidz

**Citizenship/Residency Status:** 

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative:

Analytical:

Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2008

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

Award ID: 0801465 Associate Information Reporting Year: 2009

**Associate Information:** 

Name: Lewis, Shevaun

Has the student been engaged in IGERT activities, research, education, or training during

this reporting period? Yes

**Years Active:** 

2008-2009 Project Year

Current IGERT Advisor(s): (Reported by associate) – Andrea Zukowski, Colin Phillips,

Jeffrey Lidz

Citizenship/Residency Status:

U.S. Citizen/U.S. National

**GRE Scores:** 

Verbal:

Quantitative: Analytical:

Subject Score:

**GRE Subject:** 

**IGERT Associates:** 

First enrolled in graduate study in an IGERT department: 08/2008

First participated in the IGERT project: 08/2008

**Current Situation:** 

Has not yet graduated, but is pursuing a Ph.D. at your institution.

# Award ID: 0801465 IGERT Project Features - Trainee Preparation in Multidisciplinary/Interdisciplinary Research PI: Phillips, Colin - Reporting Year: 2009

#### **Best Practice 1**

Students have benefited greatly from working in cross-disciplinary groups to learn to use shared new equipment and to train other new users. A team of IGERT participants worked very effectively together to plan and install a new eye-tracking facility, and then to design a mini-course for other users from different departments, as a part of our intensive 2-week Winter Storm workshop.

#### Measure 1

The measure of success of this effort is that it has led to a number of concrete new research projects that are being developed by IGERT participants, including a project by students in one of our new courses developed for the IGERT program. It has also led to additional students becoming interested in joining the IGERT program.

#### **Best Practice 2**

A successful new research group on critical periods in language learning was formed as a part of our intensive 2-week Winter Storm workshop. The group brought together students from a wide range of departments, and the group continued to meet to plan research after the winter workshop ended. We believe that the keys to the success of this group were (i) lack of domination by participants from one area, (ii) allowing time for students to understand their different starting assumptions, (iii) a 'soft touch' in faculty management of the group, and (iv) finding ways for students from different backgrounds to make important contributions.

#### Measure 2

The best indicator of the success of this group is the fact that it continued to meet regularly after the winter workshop finished. Our assessment of the causes of this success is based upon student-led analysis of the different outcomes for this research group and two other research groups that were run concurrently during the winter workshop.

#### **Best Practice 3**

Measure 3	
Mark the following components of multidisciplinary/interdisciplinary research preparation that apply to the majority of IGERT Trainees involved in your project during this reporting period.	Response
Trainees undertook formal coursework/training in research methods, practices, and instrumentation in their primary discipline equivalent to traditional graduate students.	Yes
Trainees had practical, hands-on laboratory and/or field experience in conducting research across the breadth of disciplines in the IGERT program.	Yes
Trainees undertook formal coursework/training across the breadth of disciplines encompassed by the IGERT project.	Yes
Trainees undertook formal coursework/training in both the ethical conduct of research and ethical conduct related to the themes encompassed by your IGERT project.	No
Other preparation to conduct high-quality research. : Trainees played a leading role in designing and leading the interdisciplinary training activities, particularly during the 2-week Winter Storm workshop	Yes
No components of Trainee Preparation in Multidisciplinary/Interdisciplinary Research applied during this reporting period.	No

Award ID: 0801465 IGERT Project Features - Trainee Preparation in Professional Skills PI: Phillips, Colin - Reporting Year: 2009	
Mark the following components of professional skills development that apply to the majority of IGERT trainees involved in your project during this reporting period.	Response
Trainees undertook coursework/training that included regular faculty critique of and feedback on professional writing.	Yes
Trainees authored, submitted, or published research papers in refereed journals.	Yes
Trainees undertook coursework/training (e.g., brown bags, seminars) that included regular critique of and feedback on professional speaking/presentation skills.	Yes
Trainees made presentations at academic/scientific professional conferences or meetings.	Yes
Trainees presented results from their IGERT project to professional, nonacademic audiences (e.g., industry, government).	No

Trainees undertook coursework/training to develop media-based or information technology-based communication skills.	No
Trainees produced multimedia materials, Web sites, or other cyber-enabled tools to communicate the results of their IGERT activities to external audiences.	Yes
Trainees used multimedia materials, Web sites, or other cyber-enabled tools as part of their interdisciplinary scientific training and collaboration.	Yes
Trainees received training in team-building and project management skills.	Yes
Trainees received training in effective time and task management.	No
Trainees <b>participated as members of teams</b> engaged in joint research, education, and/or outreach efforts.	Yes
Trainees led teams engaged in research, education, and/or outreach efforts.	Yes
Other preparation in professional skills development. :	No
No components of Trainee Preparation in Professional Skills applied during this reporting period.	No

## Award ID: 0801465 IGERT Project Features - Trainee Preparation for STEM Careers PI: Phillips, Colin - Reporting Year: 2009

Mark the following components that apply to the majority of IGERT trainees involved in your project during this reporting period.	Response
Trainees received training or instruction (e.g., courses, workshops) in effective teaching practices.	No
Trainees developed and presented course and/or curriculum materials.	No
Trainees served as mentors to others (e.g., graduate students, undergraduates, laboratory technicians).	Yes
Trainees received training/mentoring in grant proposal preparation.	Yes
Trainees authored/coauthored and submitted grant proposals.	Yes
Trainees received training/instruction on the interaction between academic research and industrial technical requirements.	No
Trainees received training/instruction for applying their research to address public policy concerns or issues.	No
Trainees had internships (off-campus, research, educational, and/or work experiences) in nonacademic settings (e.g., industry, government).	No

Trainees had professional interactions other than internships with nonacademic employers (e.g. industry, government) in order to learn about career opportunities and requirements.	No
Trainees communicated, worked, or collaborated with scientists of other nationalities.	Yes
Other preparation for careers in academia. : Trainees played key role in developing the assessment plan for the IGERT	Yes
Other preparation for nonacademic careers (e.g., industry, government). :	No
No components of Trainee Preparation for STEM Careers applied during this reporting period.	No

## Award ID: 0801465 IGERT Project Features - Tactics for Recruitment and Broadening Participation

PI: Phillips, Colin - Reporting Year: 2009

Do you have an overall, active plan with a specific set of goals and timelines for the recruitment and retention of trainees, including specifics for broadening participation of groups underrepresented in science and engineering?

No

#### **Best Practice 1**

Our IGERT program aims to overcome the fractionation of the various fields engaged in the language sciences. However, this fractionation presents one of our primary recruiting challenges, as most potential students and their mentors are aware of only a small part of what our interdisciplinary team has to offer, and may even be unaware of the value of interdisciplinary research. We are taking a number of measures to address this problem, through creation of a "Language at Maryland" web site that presents an integrative view of language science research at UM, including the IGERT program, through organization of interdisciplinary workshops at annual disciplinary conferences, and through individual contacts with colleagues at other institutions.

#### **Best Practice 2**

The PI participated in an event organized by UM in conjunction with the Atlanta Universities Consortium (AUC: Morehouse, Spelman, Clark Atlanta), October 2008, aimed at bringing UM graduate opportunities to the attention of AUC's large population of students for underrepresented minorities. The PI and IGERT students participated in a number of UM graduate recruitment events, particularly those targeting students from minority and first-generation college backgrounds.

#### **Best Practice 3**

The various departments that participate in the IGERT program collaborated to a greater degree than previously in contacting admitted graduate students and hosting them during their campus visits. This gave prospective students a greater sense of the interdisciplinary opportunities in language sciences on offer at Maryland.

practices have SERT project	Response
graduate pool of	NA
nstitutions	Productive
vice office,	Not productive
	NA
ommunicate with,	Somewhat productive
cularly during	Productive
Underrepresente Minorities	ed Women
NA	NA
Productive	Productive
NA	NA
1771	1,111
r	graduate pool of Institutions Price office, Institutions Price office, Institutions Price office, Institutions Institution

## Award ID: 0801465 IGERT Project Features - International Opportunities PI: Phillips, Colin - Reporting Year: 2009

According to NSF records, this project <u>does not have</u> explicit funding for an international component.

#### **Training Experience/Component 1**

Annie Gagliardi conducted fieldwork with child and adult speakers of Tsez, a minority language spoken in Dagestan. This research experience proved to be challenging, productive, and highly motivating. This project has also provided inspiration to other IGERT students, who have developed more ambitious international research plans.

#### **Training Experience/Component 2**

Pedro Alcocer, an IGERT participant who will be supported as a trainee from 2009, has been working with researchers from the Universidade Federal do Rio de Janeiro in Brazil to develop studies that Pedro will carry out in Rio in summer 2009. Pedro will also use his visit to Brazil to offer a version of the mini-course that he offered for IGERT students during our Winter Storm workshop.

#### **Training Experience/Component 3**

Numerous participating students have worked with speakers of diverse languages in their researchers. For example, Sunyoung Lee-Ellis works with immigrant and heritage speakers of Korean in her research on language attrition. Joshua Riley is part of a student team that has been conducting brain recordings of speech sound perception in speakers of Amharic, the primary language of Ethiopia.

#### Research/Educational Achievement 1

Annie Gagliardi's work in Dagestan has led to a number of research results that are being prepared for submission to conferences and journals.

Research/Educational Achievement 2

Research/Educational Achievement 3

Is international participation required for all trainees involved in your IGERT project?

No

Did one or more trainees from your IGERT project engage in an international experience through the project during this reporting period?

Yes

**Specific International Experiences - Experience Detail 1** 

**Country:** 

Russia

**Trainees involved:** 

Which of the following international actions or work in this country involved trainees?	Response
Trainees attended conferences/workshops.	No
Trainees undertook coursework/training.	No
Trainees worked, conducted research/field work, or interned in industrial settings.	Yes
Trainees worked, conducted research/field work, or interned in academic settings.	No
Trainees worked, conducted research/field work, or interned in other settings (e.g., national laboratories, nongovernmental organizations).	No
Other international actions/work.	No

## Award ID: 0801465 IGERT Project Features - Partnerships/Collaborations PI: Phillips, Colin - Reporting Year: 2009

Were there active partnerships/collaborations outside of your university through your IGERT project during this reporting period?

Yes

## **Academic Partner 1**

**Active Status** 

Yes

#### **Partner Name**

Gallaudet University

#### Type of partner

Ph.D.-granting institution

Minority-serving institution

#### Funding arrangement for this partner

No funding/direct financial interaction is involved in this partnership.

#### Activities for this partner/institution

**Collaborative Research/Teaching:** Partner organization's personnel work with IGERT project staff on collaborative research/teaching.

#### Activities for this partner/institution

The IGERT program has led to strengthened connections and communication between language scientists at UM and at Gallaudet University, the leading institution of higher education for the Deaf.

#### **Government Partner 1**

**Active Status** 

Yes

**Partner Name** 

National Institutes of Health

Type of government agency

U.S. Federal laboratory or research facility

#### Funding arrangement for this partner

Partner provides funding to the IGERT project for research, curriculum, or other project activities, but not directly for trainees.

#### **Activities for this partner/institution**

Facilities: IGERT trainees use a partner organization's facilities for project activities.

**Collaborative Research/Teaching:** Partner organization's personnel work with IGERT project staff on collaborative research/teaching.

**Personnel Exchange:** IGERT Trainees and/or partner organization personnel use each other's facilities or work at each other's sites on an ad hoc or as-needed basis.

#### Activities for this partner/institution

IGERT trainee Joshua Riley benefited directly from his access to special patient populations through the National Institute on Deafness and other Communication Disorders (NIDCD) at NIH's research campus. His work on the rare condition of "Foreign Accent Syndrome" led to a presentation at the Academy of Aphasia meeting.

#### **Government Partner 2**

**Active Status** 

Yes

**Partner Name** 

Center for Advanced Study of Language

Type of government agency

U.S. Federal laboratory or research facility

#### Funding arrangement for this partner

Partner provides funding to the IGERT project for research, curriculum, or other project activities, but not directly for trainees.

Other :CASL provides partial funding and research supervision for some IGERT Associate students who are fully participating in program activities

#### **Activities for this partner/institution**

Facilities: IGERT trainees use a partner organization's facilities for project activities.

**Collaborative Research/Teaching:** Partner organization's personnel work with IGERT project staff on collaborative research/teaching.

**Personnel Exchange:** IGERT Trainees and/or partner organization personnel use each other's facilities or work at each other's sites on an ad hoc or as-needed basis.

**Internships:** IGERT Trainees work in a partner's facilities specifically as interns.

#### Activities for this partner/institution

IGERT program participants and CASL staff partnered to develop facilities for using eye-movements to study language processing. This has been directly responsible for creating new links between researchers on language and cognitive decision theory, and for bringing new student participants into the IGERT program from UM's Psychology Department.

## Award ID: 0801465 IGERT Project Features - Project Evaluation PI: Phillips, Colin - Reporting Year: 2009

Do you have an overall plan with milestones and timelines for measuring progress toward attaining key IGERT project goals?

Yes

If your IGERT project paid for professional evaluation services external to the IGERT institution or used expertise internal to your institution to aid in the evaluation process, please share contact information.

#### Organization/individual name

Sharon La Voy

#### **Address**

Office of Institutional Research, Planning, and Assessment, 1101 Mitchell Building, College Park, MD 20742

#### E-mail address

slavoy@umd.edu

#### **Phone**

3014053828

#### Web site

https://www.irpa.umd.edu/

#### Was this an external evaluation service provider?

No

Please describe a key insight, and your response to it (if any), that has been identified through assessment and evaluation during this reporting period.

#### Insight/Learning

Our program learned about the value of close student involvement in the assessment and evaluation process, and the value of using this process to appropriately manage expectations for group activities. During and after our program?s 2-week intensive Winter Storm workshop

students developed, implemented, and analyzed a detailed assessment survey. This effort led to much constructive feedback on the successes and weaknesses of the event, which will lead to improvements when we run a similar event next year. Student leadership in the assessment process fostered a greater sense of investment in the success of the program. One of the main findings of the survey was that students had unclear, and sometimes unrealistic expectations of what could be achieved during a 2-week workshop, and about the accommodations that would be needed when working in a diverse group.

#### Response

The program has made it a priority for students to play a leading role in the broader assessment plan for the IGERT project, something that was not originally envisioned for the project. As a part of this, students have met with Sharon La Voy, UM?s Director of Assessment at the Office of Institutional Research, Planning and Assessment to work on developing the plan, and students gave a presentation to Ms La Voy and her staff about the assessment instrument that they themselves developed for the Winter Storm workshop.

## Award ID: 0801465 IGERT Project Features - Institutional Impacts PI: Phillips, Colin - Reporting Year: 2009

Please consider your responses to the following in light of changes/impacts that have occurred in your institution as a result of your IGERT project during this reporting period.	Response
The institution(s) involved in your IGERT project has/have been successful in obtaining large-scale Federal grants (e.g., STC, ERC, MRSEC).	No
Interdisciplinary/multidisciplinary courses have been developed for IGERT Trainees and Associates.	Yes
Interdisciplinary/multidisciplinary courses are being delivered to IGERT Trainees and Associates.	Yes
Interdisciplinary/multidisciplinary courses that have been developed for IGERT are being delivered to non-IGERT students.	Yes
New certificate or degree programs have been developed and are available on the IGERT campus(es).	No
Department curriculum or policy changes took place to emphasize or require interdisciplinary/multidisciplinary preparation for all graduate students.	No
Institutional changes that support and encourage team multidisciplinary/interdisciplinary course development and teaching have occurred.	No
Institutional changes that support and encourage team-based graduate student learning and assessment have occurred.	No
Institutional changes that support and encourage graduate students to gain laboratory and research experiences across disciplines have occurred.	Yes

Institutional changes incorporating improved recruitment and retention policies and practices for underrepresented groups and women based on IGERT have occurred.

No

Other: IGERT project personnel consulted on best practices in graduate training by faculty from very diverse disciplines across the university.

Yes

# Please describe a demonstrable institutional change (if any) that has occurred during this reporting period due to IGERT

The IGERT has led to improved collaboration across some participating departments in overall graduate recruitment practices, not only those involving prospective IGERT trainees.

## Award ID: 0801465 Comments PI: Phillips, Colin - Reporting Year: 2009

No data has been entered.

Printed: Jun 16, 2009

## Award ID: 0801465 Publications, Presentations, and Patents PI: Phillips, Colin - Reporting Year: 2009

#### **Journal Articles in Refereed Publications**

Aoshima, S., Yoshida, M., & Phillips, C. (2009). Incremental processing of coreference and binding in Japanese. Syntax, 12, 93-134.

Bergelson, E., & Idsardi, W. J. (2009) A Neurophysiological Study into the Foundations of Tonal Harmony. NeuroReport. 20: 239â244.

Brill, G. A., Glass, A. L., Rashid, H., & â Hussey, E. (2008). Identity, uncertainty, and response bias in repetition blindness. American Journal of Psychology, 121, 409-449.

Christophe, A., S. Millotte, S. Bernal and J. Lidz. (2008) Bootstrapping Lexical and Syntactic Acquisition. Language and Speech, 51, 61-75.

Conroy, A., Lidz, J. & Musolino, J. (2009) The Fleeting Isomorphism Effect. Language Acquisition, 16, 106-117.

Conroy, A., Takahashi, E., Lidz, J., & Phillips, C. (2009). Equal treatment for all antecedents: How children succeed with Principle B. Linguistic Inquiry, 40, 446-486.

David, S. V., Mesgarani, N, Fritz, J. B. & Shamma, S. A. (2009) Rapid Synaptic Depression Explains Nonlinear Modulation of Spectro-Temporal Tuning in Primary Auditory Cortex by Natural Stimul J. Neurosci 29 3374-3386.

Gouvea, A. F., Phillips, C., Kazanina, N., & Poeppel, D. (2009). The syntactic processes underlying the P600. Language and Cognitive Processes, 24.

Grant K., Elhiali, M., Shamma, S. A., Walden, B.,Surr, R. K., Cord, M. et al. (2008) An Objective Measure for Selecting Microphone Modes in OMNI/DIR Hearing Aid Circuits" Ear

- and Hearing 29:199-213.
- Grushin A, Reggia J. (2008) Automated Design of Distributed Control Rules for the Self-Assembly of Pre-specified Artificial Structures, Robotics and Autonomous Systems, 56, 334-359.
- Guo, J., Guo, T., Yan, Y., Jiang, N., & Peng, D. (2009). ERP evidence for different strategies employed by native speakers and L2 learners in sentence processing. Journal of Neurolinguistics, 22, 123-134.
- Halberda, J., L. Taing & J. Lidz. (2008) The age of most comprehension and its potential dependence on counting ability in preschoolers. Language Learning and Development, 4, 99-121.
- Hamlin, J. K., Hallinan, E. V., & Woodward, A. L. (2008). Do as I do: 7-month-old infants selectively reproduce others' goals. Developmental Science, 11(4), 487-494.
- Hornstein, N., Martins, A. & Nunes, J. (2008). Perception and Causative Structures in English and European Portuguese: -feature agreement and the distribution of bare and prepositional infinitives. Syntax 11.2, 198-222.
- Hsu, N., Hermon, G., & Zukowski, A. (2009). Young children's production of head-final relative clauses: Elicited production data from chinese children. Journal of East Asian Linguistics.
- Idsardi, W. J. (2008) Combinatorics for metrical feet. Biolinguistics. 2(2): 233-236.
- Kazanina, N. & Phillips, C. (2009) Multiple routes to pronoun resolution in Russian cataphora. Quarterly Journal of Experimental Psychology, 62.
- Lau, E. F., Phillips, C., & Poeppel, D. (2008). A cortical network for semantics: (de)constructing the N400. Nature Reviews Neuroscience, 9, 920-933.
- \*Lee-Ellis, S. (2009). The development and validation of a Korean C-Test using Rasch Analysis. Language Testing, 26(2), 245-274.
- Lidz, J. & Williams, A. (2009) "Constructions on Holiday," Commentary on A. Goldberg, 2006, Constructions at Work, Cognitive Linguistics, 20, 177-190.
- Monahan, P. J., de Souza, K., & Idsardi, W. J. (2008) Neuromagnetic evidence for the auditory restoration of fundamental pitch. PLoS One. 3(8): e2900.
- Newman, R. S. (2008). The level of detail in infants' word learning. Current Directions in Psychological Science, 17(3), 229-232.
- Novick, J. M., Thompson-Schill, S. L., & Trueswell, JC (2008). Putting lexical constraints in context into the visual-world paradigm. Cognition, 107, 850-903.
- Pleskac, T., Dougherty, M. R., & Wallsten, T. (2009). Effects of Divided Versus Full Attention on Memory and Judgment. Journal of Memory and Language, 60, 165-179.
- Pietroski, P., & J. Lidz. (2009) Natural number concepts: No derivation without formalization. Behavioral and Brain Sciences, 31, 666-667.
- Rakison, D.H., & Woodward, A. L. (2008). Introduction to the special section: New perspectives on the effects of action on perceptual and cognitive development. Developmental Psychology, 44(5), 1209-1213.
- \*Riley, J. & Cogan, C. (2007) A Two-Mechanism Model of Pure Word Deafness. Maryland Working Papers in Linguistics, 16.
- Rodriguez A, Reggia J. (2009) A Distributed Learning Algorithm for Particle Systems, Integrated Computer-Aided Engineering, 16, 1-20.
- Shamma S., (2008) "On the emergence and awareness of auditory objects" PLoS biology, 6(6). Shamma A., (2008) "Characterizing Auditory Receptive Fields", Neuron, 58(6), p.829-831.
- Syrett, K. & Lidz, J. (2009) Quantifier Raising in 4-year-olds. Language Acquisition, 16, 67-81.
- Vaish, A., Grossmann, T. & Woodward, A. (2008). Not all emotions are created equal: The negativity bias in early development. Psychological Bulletin, 134(3), 383-403.
- Wagers, M. & Phillips, C. (2009) Multiple dependencies and the role of the grammar in real-time comprehension. Journal of Linguistics, 45, 395-433.

Wagers, M., Lau, E. F. & Phillips, C. (2009) Agreement attraction in comprehension: representations and processes. Journal of Memory and Language, 61.

Weems S, Winder R, Bunting M, Reggia J. (2009) Running Memory Span: A Comparison of Behavioral Capacity Limits with Those of an Attractor Neural Network, Cognitive Systems Research, 10, 161-171.

Winder R, Reggia J, Weems S, Bunting M. (2009) An Oscillatory Hebbian Network Model of Short-Term Memory, Neural Computation, 21, 741-761.

Winn, M. & Idsardi, W. J. (2008) Musical evidence regarding trochaic inversion. Language and Literature. 17(4): 335-349.

Woodward, A. L. (2009). Infants' grasp of others' intentions. Current Directions in Psychological Science, 18, 53-57.

Xiang, M., â Dillon, B. W., & Phillips, C. (2009) Illusory licensing effects across dependency types: ERP evidence. Brain & Language, 108, 40-55.

Zukowski, A. (2009). Elicited production of relative clauses in children with Williams syndrome. Language and Cognitive Processes, 24(1), 1â144.

#### **Journal Articles in Non-Refereed Publications**

Dougherty, M.R. & Thomas, R. (2009). Minerva-DM. Enclyopedia of Medical Decision Making. Sage.

#### **Books**

Hornstein, N. (2009) A Theory of Syntax; Minimal Operations and Universal Grammar. Cambridge: Cambridge University Press.

Woodward, A. L. & Needham, A (Eds.). (2009) Learning and the infant mind. Oxford: Oxford University Press.

#### **Book Chapters**

Hornstein, N. & Boeckx, C. (2009) Approaching Universals from Below: I-Universals in Light of a Minimalist Program for Linguistic Theory. In M.H. Christiansen, C. Collins and S. Edelman eds. Language Universals.Oxford University Press. Oxford.

Hornstein, N. & Nunes, J. (2008) Adjunction, labeling, and bare phrase structure. Biolinguistics volume 2.1.

Idsardi, W. J. & Raimy, E. (2008) Reduplicative Economy. In Vaux, Bert and Nevins, Andrew (editors) Rules, Constraints and Phonological Phenomena. Oxford: Oxford University Press. 149-184.

Idsardi, W. J. (2009) Calculating Metrical Structure. In Cairns, Charles and Raimy, Eric (editors) Contemporary Views on Architecture and Representations in Phonological Theory. Cambridge: MIT Press. 191-211.

Needham, A. & Woodward, A. L. (2009). Introduction. In A. Woodward & A. Needham (Eds.) Learning and the infant mind (pp xii-xxvii). Oxford University Press.

Woodward, A. L. (2009). Learning about intentional action. In A. Woodward & A. Needham (Eds.) Learning and the infant mind (pp.227-248). Oxford University Press.

#### **Conference Publications**

Bergelson, E. & Idsardi, W. J. (2009) Structural Biases in Phonology: Infant and Adult Evidence from Artificial Language Learning. Proceedings of the Boston University Conference on Child Language Development. 33: 85-96.

Cannon, E. N., Schlebecker, K. L. & Woodward, A. (2009). Does Object Appearance Influence 18-Month-Olds' Goal Imitation? Poster presentation at the biennial meetings of the

- Society for Research in Child Development, Denver, CO.
- Cannon, E. N., Turek, C. & Woodward, A. (2009). Action Anticipation Relates to Action Production in 12-Month-Olds. Poster presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.
- Chiang, D., Marton, Y. & Resnik, P. (2008) Online Large-Margin Training of Syntactic and Structural Translation Features. Proceedings of the Conference on Empirical Methods on Natural Language Processing.
- Dicker, J., â Dunbar, E., & Johns, A. (2009). Developing intermediate language learning materials: A Labrador Inuttitut story database. In J. Reyhner & L. Lockard (Eds.), Indigenous Language Revitalization: Encouragement, Guidance & Lessons Learned (pp. 155-166). Flagstaff: Northern Arizona University.
- Dyer, C., Muresan, S., & Resnik, P. (2008) Generalizing Word Lattice Translation. 46th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies, Columbus, Ohio.
- Dyer, C., Setiawan, H., Marton, Y. & Resnik, P. (2009) The University of Maryland Statistical Machine Translation System, Third Workshop on Machine Translation.
- Gerson, S. A., Eisenband, L. R., & Woodward, A. (2009). What Can 8-Month-Olds Pull Out of Means-End Training? Generalization of Training Effects on Understanding of Actions in Others. Poster presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.
- Gerson, S. A., & Woodward, A. (2009). Early Intention Understanding: The Role of Self-Produced Experience and Its Effect on Object Generalization. Poster presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.
- Greene, S. & Resnik, P. (2009) More than Words: Syntactic Packaging and Implicit Sentiment. Proceedings of the North American Chapter of the Association for Computational Linguistics Human Language Technologies Conference.
- Harbison, I. J., Davelaar, E., & Dougherty, M. R. (2008). Stopping rules and memory search termination decisions. In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.), Proceedings of the 30th Annual Conference of the Cognitive Science Society (pp. 575-570). Austin, TX: Cognitive Science Society.
- Henderson, A. M. E., Sabbagh, M. A., Woodward, A., & Saby, J. (2009). Retrieval Cues Do Not Help Preschoolers Remember the Name of an Object From a Foreign Country. Poster presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.
- Henderson, A. M. E., & Woodward, A. (2009). Do 14-Month-Olds Represent Shared Intentions in Collaborative Action? Symposium presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.
- Henderson, A. M. E., Woodward, A., Bonny, J., & Smith, J. (2009). Do Nine-Month-Olds Appreciate the Shared Nature of New Linguistic Forms? Poster presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.
- Hunter, T., Halberda, J., Lidz, J. & Pietroski, P. (2008) Beyond Truth Conditions: The Semantics of Most. Proceedings of Semantics and Linguistic Theory.
- Huynhm, T., Reggia, J. (2009) Improving Rule Extraction from Neural Networks by Modifying Hidden Layer Representation, Proc. International Joint Conference on Neural Networks.
- Idsardi, W. J. & Raimy, E. (2009) Three types of linearization and the temporal aspects of speech. Proceedings of the GLOW Workshop on Linearization.
- Jung, J. & Reggia, J. (2009) Nested Evolution of an Autonomous Agent Using a Descriptive Encoding, Genetic and Evolutionary Computation Conference (GECCO).
- Koenig, M. A., & Woodward, A. (2009). English-Speaking Toddlers Generalize Words Differently From English and Dutch Speakers. Symposium presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.

Lapizco-Encinas, G., Kingsford, C., Reggia, J. (2009) A Cooperative Particle Swarm Optimization Method for Side-chain Packing, Proc. IEEE Swarm Intelligence Symposium. Marton, Y. & Resnik, P. (2008) Soft Syntactic Constraints for Hierarchical Phrased-Based Translation. 46th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies, Columbus, Ohio.

Madnani, N., Resnik, P., Dorr, B. J. & Schwartz, R. (2008) Are Multiple Reference Translations Necessary? Investigating the Value of Paraphrased Reference Translations in Parameter Optimization, Proceedings of the Eighth Conference of the Association for Machine Translation in the Americas.

Madnani, N., Resnik, P., Dorr, B. J. & Schwartz, R. (2008) Applying Automatically Generated Semantic Knowledge: A Case Study in Machine Translation. NSF Symposium on Semantic Knowledge Discovery, Organization and Use.

Monahan, P. J., Takahashi, E., Nakao, C., & Idsardi, W. J. (to appear) Not All Epenthetic Contexts are Equal: Differential Effects in Japanese Illusory Vowel Perception. Proceedings of the Japanese-Korean Conference.

Lewis, D., Reggia J. (in press) An Unsupervised Learning Method for Representing Simple Sentences, Proc. International Joint Conference on Neural Networks.

Newman, R., Samuelson, L. & Gupta, P. (2008). Learning novel neighbors: distributed mappings help children and connectionist models. In Proceedings of CogSci2008.

Phillips, C. (2009). Should we impeach armchair linguists? In S. Iwasaki (ed.), Japanese-Korean Linguistics 17. CSLI Publications.

Richardson, C, Jampol, N., Cooley, S., Trageser, J., Killen, M., & Woodward, A. (2009). The Accidental Transgressor: Testing Theory of Mind and Morality Knowledge in Young Children. Poster presentation at the biennial meetings of the Society for Research in Child Development, Denver, CO.

Setiawan, H, Kan, M. Y., Li, H. & Resnik, P. (2009) Topological Ordering of Function Words in Hierarchical Phrase-based Translation. Proceedings of the Association for Computational Linguistics and the International Joint Conference on Natural Language Processing, Singapore. Takahashi, E. & Lidz, J. (2008) Beyond Statistical Learning in Syntax. Proceedings of Generative Approaches to Language Acquisition.

#### **Conference Presentations**

â Alcocer, P., â Dillon, B. & Idsardi, W. (2009, March) Auditory cortex sensitive to F1-F2 interaction: Evidence from MEG. Poster presented at 16th Annual Meeting of the Cognitive Neuroscience Society. San Francisco, CA.

â Alcocer, P., & Phillips, C. (2009, March) A cross-language reversal in illusory agreement licensing. Poster at the CUNY Conference on Sentence Processing, Davis, California.

Atkins, S. & Dougherty, M. R. (2008, November) Hypothesis guided information search and the deployment of visual attention in judgment tasks. Poster session presented at Psychonomic Society, Chicago, IL.

Bergelson, E., de Souza, K., & Idsardi, W. J. (2008, July) A Neurophysiological Study into the Foundations of Harmony. Poster presented at Music and Language II conference. Tufts University.

Bergelson, E. & Idsardi, W. J. (2008, November) An MEG MMF study into the foundations of harmony. Poster presented at the annual meeting of the Society for Neuroscience. Washington DC.

Blayney, E., Singer, E., Stimley, S. & Newman, R. (2008) Infant perception of speech in noise and its relation to later language outcomes. Poster presented at the International Congress for the Study of Child Language.

Bunger, A., Baier, R. & Lidz, J. (2009, April) Two-Year-Olds Think That Results Lie at the Core of Causative Events." Poster Presented at Society for Research in Child Development.

```
Cogan, G. B., Figueroa, V., Idsardi, W. J., & Poeppel, D. (2008, November) Neural correlates of syllable structure: Differentiating between rhythm classes of languages. Poster presented at the annual meeting of the Society for Neuroscience. Washington DC.
```

â Dillon, B. & Idsardi, W. (2009) A computational investigation of inuktitut allophony. Paper presented at the Montreal-Ottawa-Toronto Phonology Workshop, University of Toronto. â Dillon, B., Idsardi, W. & Phillips, C. (2008) Learning vowel categories: Challenges from Turkish and Inuktitut. Poster presented at the Cognitive Science Society conference. â Dillon, B., Idsardi, W. & Phillips, C. (2008, July) Structuring the Turkish Vowel Space. Poster presented at the 30th annual meeting of the Cognitive Science Society. Washington

â Dillon, B., Xiang, M., â Chow, W. Y., & Phillips, C. (2009, March) Processing local and long-distance anaphors in Mandarin Chinese. Poster at the CUNY Conference on Sentence Processing, Davis, California.

DC.

Dougherty, M. (2008, September) Diagnosing diagnostic hypothesis generation in adolescents. Paper presented at NSF workshop on Higher order cognition in Adolescents. Arlington Virginia.

Dougherty, M. & Atkins, S. (2008, July) The mediating role of memory on judgments of probability. Paper presented at Society for Mathematical Psychology. Washington DC. Dougherty, M. & Hanges, P. (2008, November) Rexamining the white-male effect: The mediating role of cognitive skill in the judged probability. Poster session presented at Annual Meeting of the Society for Judgmentand Decision Making, Chicago, IL.

Dougherty, M., â Hussey, E., & Harbison, J.I. (2009, July) The dynamics of memory retrieval in self-terminated search. In J. Marewski (Chair), Ecological Analysis: Sharpening Our Scissors to Cut Environmentally Embedded Cognition. Symposium to be conducted at the annual meeting of the Cognitive Science Society. Amsterdam, Netherlands.

Dougherty, M., Sprenger, A., Atkins, S., Franco-Watkins, A. & Thomas, R. P. (2008, November) The mediating role of memory and attentional control in probability judgment. Poster session presented at Psychonomic Society, Chicago, IL.

â Dunbar, E. (2009) Pitfalls of distributional allophone learning. Paper presented at the Montreal-Ottawa-Toronto Workshop in Phonology (MOT), Toronto, Ontario, Canada. Elhilali, M. & Shamma, S. (2008) Information Bearing Components of speech intelligibility under babble-noise and bandlimiting distortions. International Conference on Acoustics, Speech, and Signal Processing.

\*Gagliardi, A. (2009, January) The Acquisition of Tsez Noun Classes. In S. Anderson (Chair), Languages of the Caucasus and Linguistic Theory. Symposium conducted at the Linguistic Society of America Annual meeting, San Francisco, CA.

\*Gagliardi, A. (2009, April) Acquiring Noun Classes: The first steps in Tsez. Paper presented at the Workshop for Young Linguists Working on Caucasian Languages, Lyon, France.

\*Gagliardi, A. & Lidz, J. (2008, November) The Acquisition of Filler-Gap Dependencies in 15- and 20-month-olds. Paper presented at the 33rd Annual Boston University Conference on Language Development, Boston, MA.

\*Gagliardi, A., Shenk, T. & Lidz, J. (2009, March) The Acquisition of Filler-Gap Dependencies in 15- and 20-month-olds. Paper presented at the CUNY Sentence Processing Conference, Davis, CA.

\*Gagliardi, A.. The Acquisition of Tsez Noun Classes. (2009, January) Invited talk at the Symposium for Languages of the Caucasus and Linguistic Theory. LSA Annual meeting. Haarmann, H. J., George, T. G, Smaliy, A., Grunewald, K. & Novick, J. M. (2009) Alpha neurofeedback training and its implications for studies of cognitive creativity. Paper presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Halberda, J., Lidz, J, Hunter, T. & Pietroski, P. (2008, May) An interface between language and vision: Quantifier words and set-based processing, Paper presented at Vision Sciences Society 8th Annual Meeting. Naples, Florida.

- Harbison, J. I., Dougherty, M. R. & Bunting, M. (2008, November) Block span: A new automated working memory task. Poster session presented at Psychonomic Society, Chicago IL.
- Harbison, J. I. & Dougherty, M. R. (2008, November) Judgment and the Termination of Memory Search. Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL.
- Harbison, J. I., Dougherty, M. R., Davelaar, E. & Faayed (2008, July) On the lawfulness of the decision to terminate memory search. Paper presented at Cognitive Science Meeting. Washington DC
- â Hussey, E. & Dougherty, M. (2008, November) Cognitive foundations of risk perception and risk-seeking behavior. Poster presented at the annual meeting of the Society for Judgment and Decision Making, Chicago, IL.
- Hwang, S. (2009, February) Evidence for the Syntactic Representation of the Domain Restriction of Quantifiers. Paper presented at the Mass/Count Workshop. University of Toronto, Toronto, Canada.
- Hwang, S., Monahan, P. & Idsardi, W. (2008, July) The Perceptual Consequences of Voicing Mismatch in Obstruent Consonant Clusters. Workshop: Consonant Clusters and Structural Complexity. Ludwig-Maximilians-University, Munich, Germany.
- Hwang, S., Monahan, P. & Idsardi, W. (2008, July) Evidence for the early detection of voicing mismatch in obstruent consonant clusters. Poster presented at Cognitive Science Society, Annual Meeting. Washington, DC, USA.
- Hwang, S., Monahan, P. & Idsardi, W. (2009, March) Asymmetric phonological predictions in speech perception: MEG evidence. Poster presented at Cognitive Neuroscience Society, Annual Meeting. San Francisco, USA.
- Idsardi, W. J. (2008, September) Comments. Talk presented at the University of Delaware Workshop on Prosody. Newark, DE.
- Idsardi, W. J., Monahan, P., & de Souza, K. (2008, May) MEG evidence for auditory restoration of fundamental pitch. Poster presented at the annual meeting of the Cognitive Neuroscience Society. San Francisco.
- Idsardi, W. J. & Raimy, E. (2008, May) Computational aspects of precedence-based phonology. Talk presented at the fifth meeting of the North American Phonology Conference. Montreal.
- Jenkins III, J., Rhone, A., Grant, K. W., Idsardi, W. J., & Poeppel, D. (2008, November) Steady state responses index congruence in audio-visual integration. Poster presented at the annual meeting of the Society for Neuroscience. Washington DC.
- Kazanina, N. & Newman, R. S. (2008) Are 16-month-old infants aware of allophony? Poster presented at the 2008 International Congress for the Study of Child Language.
- â Kush, D., Omaki, A., â Dillon, B. W., â Alcocer, P., Lidz, J. & Phillips, C. (2009, March) Bound variables reveal the structure sensitivity of search. Poster at the CUNY Conference on Sentence Processing, Davis, California.
- â Kush, D., Omaki, A. & Hornstein, N. (2009) Reanalyzing Relative Clause Island Effects. Talk given at GLOW 32, Nantes, France
- Lau, E., Wagers, M., & Phillips, C. (2009, March) The consequences of number agreement on number interpretation. Poster at the CUNY Conference on Sentence Processing, Davis, California.
- \*Lee-Ellis, S. (2009, March) The development and validation of a Korean C-Test using Rasch Analysis. Presented at American Association for Applied Linguistics, Denver, CO.
- \*Lee-Ellis, S. (2008, October) Elicited production of Korean relative clauses by heritage speakers. Presented at Second Language Research Forum, Honolulu, HI.
- Lidz, J. (2009, March) The Role of Statistics in a Selective Theory of Language Learning. In J. Williams (chair) Statistical Learning in L1 & L2. Georgetown University Roundtable in Linguistics.

- Lidz, J. & Baier, R. (2008, November) Learning thematic structure: developmental changes in sensitivity to lexical and syntactic cues. Poster presented at Boston University Conference on Language Development 33.
- Lidz, J., Conroy, A. & Musolino, J. (2008, September) When revision is difficult and when it isn't: The role of the parser in ambiguity resolution. Paper presented at Generative Approaches to Language Acquisition 3. University of Connecticut.
- Lidz, J., Halberda, J., Pietroski, P. & Hunter, T. (2009, April) Approximate number representations in the acquisition of most. in D. Barner (chair) Approximate Number Representations in Language and Conceptual Development. Society for Research in Child Development. Denver.
- Lidz, J., Halberda, J., Pietroski, P., Hunter, T. & Eckman, K. (2009, April) Development of most comprehension In 42-60 month olds. Poster presented at Society for Research in Child Development. Denver.
- Long, M. H. (2009, April) The Interaction Hypothesis, TBLT, and some limits of technology for 21st century learners. Keynote, TexFLEC 10, University of Texas at Austin.
- Monahan, P., Hwang, S. & Idsardi, W. (2008, November) Predicting speech: Neural correlates of voicing mismatch in obstruent consonant clusters using MEG. Poster presented at Society for Neuroscience, Annual Meeting. Washington, DC, USA.
- Monahan, P. & Idsardi, W. J. (2008, May) Early auditory sensitivity to formant ratios in vowel perception: MEG evidence. Poster presented at the annual meeting of the Cognitive Neuroscience Society. San Francisco.
- Newman, R. S. (2008) The cocktail party effect in infants: Infants' ability to hear in noise and use top-down information. Invited lecture, University of Delaware.
- Newman, R. S. (2008) The cocktail party effect in infants: Infants' ability to hear in noise and use top-down information. Invited lecture, Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands.
- Newman, R. S. & German, D. (2008) The oral reading skills of children with oral language (word-finding) difficulties. Invited lecture, University of Delaware.
- Newman, R. S., Samuelson, L. K. & Gupta, P. (2008) Learning novel neighbors: distributed mappings help children and connectionist models. Paper presented at the 30th annual conference of the Cognitive Science Society.
- Novick, J. M., Thothathiri, M., Thompson, T., Gibson, E., & Gabrieli, J. D. E. (submitted) Selective fMRI activation in Broca's area for syntactic conflict (but not ambiguity) during sentence processing. Submitted to 15th Annual Conference on Architectures and Mechanisms for Language Processing.
- Oh, H., Contreras-Vidal, J. L., Idsardi, W. J., Poeppel, D., & Braun, A. R. (2008 November) The relationship of dynamic vowel representations in acoustic space and auditory cortical space. Poster presented at the annual meeting of the Society for Neuroscience. Washington DC.
- Omaki, A., Conroy, A. & Lidz, J. (2008, June) An experimental investigation of referential/nonreferential asymmetries in syntactic reconstruction, Paper presented at Quantitative Investigations in Theoretical Linguistics 3. Helsinki, Finland.
- Omaki, A., Wagers, M., Trock, A., Lidz, J., & Phillips, C. (2009, March) "Active Gap Search in the Visual World with lexical competitors." Poster presented at CUNY Sentence Processing Conference. UC Davis.
- Pangelinan, M., â Hussey, E., Wilson, S., & Poeppel, D. (2009, June) Decomposition of audiovisual interactions using event-related fields and independent component analysis. Poster session to be presented at the annual meeting of the International Multisensory Research Forum, New York, NY.
- Pangelinan, M., â Hussey, E., Wilson, S., Schlappal, A., Zhao, C., & Poeppel, D. (2008, November) Low-level audio-visual interactions in MEG during spatial localization. Poster presented at the annualmeeting of the Society for Neuroscience, Washington, DC.

- Phillips, C. (2008, July) How grammars leak. Invited 'Schultink Lecture' at the Netherlands Summer School in Linguistics (LOT), Utrecht, Holland.
- Phillips, C. (2008, November) The dynamics and anatomy of active sentence understanding. In R. Aslin (Chair), Neuroscience methods in language development. Symposium at the Boston University Conference on Language Development. Boston.
- Phillips, C. (2009, February) Real-time structure building and retreat from over-generation. Invited talk at the GLOW-in-Asia Workshop on Language Acquisition. EFL University, Hyderabad, India.
- Phillips, C. (2009, April) From active comprehension to effective learning of syntax and semantics. Keynote talk at the GLOW Workshop on Language Acquisition at the Syntax-Semantics Interface. Nantes, France.
- Phillips, C. (2009, April) Overgeneration in parsing and grammar. Invited talk at the conference on Formal vs. Processing Explanations of Syntactic Phenomena. York, UK.
- \*Riley, J., Butman, J., Idsardi, W. & Braun, A. (2008, October) Somatosensory Activation and Foreign Accent Syndrome: an fMRI study. Platform session at the annual meeting of the Academy of Aphasia, Turku, Finland.
- \*Riley, J., Butman, J., Idsardi, W. & Braun, A. (2008, October) Functional neuroimaging and network-level abnormalities underlying Foreign Accent Syndrome: A structural and functional MRI investigation. Talk presented at the 46th meeting of the Academy of Aphasia. Turku, Finland.
- \*Riley, J., Butman, J., Idsardi, W. & Braun, A. (2008, November) Functional neuroimaging and network-level abnormalities underlying foreign accent syndrome. Poster presented at the annual meeting of the Society for Neuroscience. Washington DC.
- \*Riley, J., Butman, J., Idsardi, W. & Braun, A. (2008, November) Network-level abnormalities and functional neuroimaging in a case of Foreign Accent Syndrome. Poster session presented at the annual meeting of the Society for Neuroscience, Washington, D.C. Son, S. & Idsardi, W. J. (2008, August) How L2 Acquisition sheds light on L1 Phonological Representations. Paper presented at the meeting of the International Congress of Linguists. Seoul, Korea.
- Siegel, E., Curtis, R., & Dougherty, M. (2008, November) Jekyll and Hyde Meet Task Switching: The Influence of Perceived Threat on Task Switching. Poster session presented at Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL. Sprouse, J., Wagers, M., & Phillips, C. (2009, April) Island constraints and the role of working memory in acceptability judgments. Talk at the GLOW Conference, Nantes, France. Strekas, A., Newman, R., & Bernstein Ratner, N. (2008) The role of selected lexical factors on confrontation naming accuracy and speed in children. Poster to be presented at the 33rd Boston University Conference on Child Language.
- Stroud, C. & Phillips, C. (2008, November) The structural and semantic selectivity of the "thematic" P600 in sentence comprehension. Poster at the Society for Neuroscience, Washington DC.
- Stroud, C. & Phillips, C. (2009, March) The structural and semantic selectivity of the 'thematic' P600 in sentence comprehension. Poster at the CUNY Conference on Sentence Processing, Davis, California.
- Thomas, R. P., Lange, N. D., & Dougherty, M. R. (2008, November) A Memory Theoretic Account of Hypothesis Generation & Information Search. Paper presented at Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL.
- Thothathiri, M., Novick, J. M., Thompson, T., Gibson, E., & Gabrieli, J. D. E. (2009) Selective fMRI activation in Broca's area for syntactic conflict during sentence processing. To be presented at the 21st Annual Convention for the Association for Psychological Science, San Francisco, CA.
- Tomlinson, T. D. & Harbison, I., Sprenger, A., Dougherty, M. R. (2008, November) Unpacking the Relationship Between Judgments and Working Memory. Poster session

presented at Annual Meeting of the Society for Judgment and Decision Making, Chicago, IL. Tsai, P., Newman, R. S. & Bernstein Ratner, N. (2008) Spoken word recognition and phonological neighborhood in Mandarin Chinese. Poster presented at the Sixth International Conference on the Mental Lexicon.

Wagers, M., Lau, E., Stroud, C., McElree, B., & Phillips, C. (2009, March) Encoding syntactic predictions: evidence from the dynamics of agreement. Talk presented at the CUNY Conference on Sentence Processing, Davis, California.

Wellwood, A., Pancheva, R., Hacquard, V., Fults, S., & Phillips, C. (2009, March) The role of event comparison in comparative illusions. Poster at the CUNY Conference on Sentence Processing, Davis, California.

Woodward, A. L. (2008) Early social learning and intentional understanding. Invited symposium at the Early Childhood Development and Later Achievement. Jacobs Foundation Conference, Marbach Castle, Germany.

Zukowski, A., McKeown, R., & Larsen, J. (2008) A tough test of the locality requirement for reflexives. Paper presented at the 32nd annual Boston University Conference on Language Development, Nov. 2007, Boston, MA.

Printed: Jun 16, 200