

Grantsmanship: Mechanics of Grant Writing

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With contributions from

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4. Biosketch

- Convinces the reviewer that key personnel
 - Can do independent research
 - Have a track record in the grant area
 - Are important for the work proposed
- **New in 2015**
 - Format and components
 - Separate forms for Fellowship and Research grant applications

Personal statement

- Describe how you are uniquely qualified to do the work
 - Based on your experience with the method
 - Based on your experience with the population
- Document history of collaboration with other key personnel
- Keep it brief
- DO NOT
 - Recapitulate the other sections of the grant here
 - Include information that is not relevant to the grant at hand
 - Talk about your personal journey to this point in time

New format as of 2015

Note the length of
the personal
statement.

Be succinct.

Principal Investigator/Program Director (Last,
First, Middle): Plante, Elena

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Elena Plante		POSITION TITLE Professor	
eRA COMMONS USER NAME eplante			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Loyola College, MD	BA	1984	Speech Pathology
Loyola College, MD	MS	1985	Speech Pathology
University of Arizona	PhD	1990	Speech & Hearing Sci.
University of Arizona	Post-Doc.	1992	Speech & Hearing Sci.

A. Personal Statement

I have been working in the area of specific language impairment for the last 20 years. As both a researcher and a licensed and certified speech-language pathologist, much of my work has either had direct clinical applications or has been conducted with an eye towards clinical problems. In the last five years, my lab has produced 5-6 publications a year, the majority of which deal with either normal language processing or language disorders. Many of these have served to demonstrate that the principles of learning in typical learners and in the context of specific language impairment. More recently, my lab has begun translating this experimental work to treatment studies. We have published one treatment study and have three additional treatment studies in various stages in the pre-publication pipeline. Therefore, I have initial experience in conducting treatment research in general, and in the core treatment methods coursework as a post doc and have continued to take statistical courses throughout my career. This will facilitate data analysis in general, and if it becomes necessary to draw on outside statistical expertise, I have sufficient statistical background of my own to bring to a consultant in order to understand whether alternate approaches are truly a match for the data at hand. Finally, I have been working with the other key personnel listed for this grant, some for decades. I have published multiple papers with both Dr. Alt and Dr. Gómez. Therefore, our working history is highly likely to continue to support the proposed work.

B. Positions and Honors.

1985-86 Speech-Language Pathologist, Frederick County Board of Education, Maryland
1992- Faculty: Dept. of Speech, Language, & Hearing Sciences, University of Arizona, Tucson AZ
1992-1997 Assistant Research Scientist
1998-2004 Associate Professor
2004- Professor, Department of Speech, Language
2006-2011 Department Head

Honors

2013 Editor's Award for Article of Highest Merit, *Journal of Speech, Language, & Hearing Research*

Contributions to Science

- Look at the sample provided by NIH and follow the instructions

<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-032.html>

- Keep it succinct
- Highlight the significance and innovation of your work
- Highlight work that relates to the current grant
- Have someone read it for tone
 - You want to avoid a bragging quality
 - You want to avoid being overly modest
- Include a URL to your full publication list

Contributions to Science:

Include up to 5 brief descriptions of relevant research findings, their significance and up to 4 references per section

Principal Investigator/Program Director (Last, First, Middle): PI Name

2006 Editor's Award for Article of Highest Merit, *Language, Speech, & Hearing Services in Schools*

2004 Fellow--American Speech, Language, Hearing Association

2003 Galileo Circle Fellow--UA Science, The University of Arizona

2000 Mortar Board Faculty Award (awarded by the undergraduate honors association)

C. Contribution to Science

1. My earliest neuroimaging studies were designed to identify a biological basis for developmental language disorder. This work, begun in 1988, was conducted in a broader context in which poor rearing practices by parents was considered a viable cause of this disorder. The early neuroanatomical studies [1,2] effectively ruled out this explanation, and supported a heritable [2], neurological explanation. As functional imaging became available, I led two of the earliest functional imaging studies of developmental language disorders [3,4], which helped to establish not just hypo-activation by anomalous activation in this population. In particular, the work indicated that language performance was not just a consequence of poor activation in classic language cortex (e.g., those closely associated acquired language disorders), but also under activation of areas more closely associated with memory and attention systems. This work has been critical because it illuminates processes that are not accessible in behavioral studies of language and learning. We are now imaging learning in individuals with language impairment to determine how the dynamic application of neural resources may differ for impaired individuals

1. Plante, E., Swisher, L., Vance, R., & Rapcsak, S. (1991). MRI findings in boys with specific language impairment. *Brain and Language*, 41, 52-66.
2. Plante, E. (1991). MRI findings in the parents and siblings of specifically language-impaired boys. *Brain and Language*, 41, 67-80.
3. Ellis Weismer, S., Plante, E., Jones, M., Tomblin, J.B. (2005). A Functional Magnetic Resonance Imaging Investigation of Verbal Working Memory in Adolescents with Specific Language Impairment. *Journal of Speech-Language-Hearing Research*, 48, 405-425. (PMID: 15989401)
4. Plante, E., Ramage, A., Maglõire, J. (2006). Processing Narratives for Verbatim and Gist Information by Adults with Language Learning Disabilities: A Functional Neuroimaging Study. *Learning Disabilities Research and Practice*, 21, 61-76.

2. My imaging work has made it clear that a true understanding of this disorder would require a departure from the typical means of studying impaired language. Research in child language disorders has typically used static measures that document current deficits, but often reveal little concerning how the deficits arose or what might be done about them. By adapting statistical learning paradigms from psychology, my lab has demonstrated that it is possible to generate rapid learning by individuals with impaired language [1] if the language input provided to learners is properly configured. This learning is input driven, but impacts expressive language performance [2]. This runs counter to the fairly widespread notion that expressive practice is needed to drive expressive language change. Most importantly, we have extended the learning principles to improve the efficacy and efficiency of language treatment for preschool children [3], moving this work from the lab to clinical practice.

**Contributions to Science,
(cont.)** URL to a publically
accessible site containing all
your publications

Relevant Research Support:
These are grants for which you
were a PI or co-investigator.
They are not grants that
provided you funding as
student or post-doc.

Principal Investigator/Program Director (Last, First, Middle): PI Name

1. Torkildsen, J., Dailey, N., Aguilar, J.M., Gómez, R., & Plante, E. (2013). Exemplar variability facilitates rapid learning of an otherwise unlearnable grammar by individuals with language impairment. *Journal of Speech, Language, & Hearing Research*, 56, 618-629. PMID: 22988285
2. Plante, E., Bahl, M., Vance, R., & Gerken, LA. (2011). Beyond Phonotactic frequency: Presentation Frequency Effects on Word Productions in Specific Language Impairment. *Journal of Communication Disorders*, 44,91-102. (PMC3010444)
3. Plante, E., Ogilvie, T., Vance, R., Aguilar, J.M., Dailey, N.S., Meyers, C., Lieser, A.M., Burton, R. (2014). Variability in the language input to children enhances learning in a treatment context. *American Journal of Speech-Language Pathology*, 23, 1-16. PMID: 24700145

Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/collections/public/!haventsetthisupintimeforLAS>

Relevant Research Support.

1R21DC014203 Plante, E. (PI) 9/1/14-8/31/16
Treatment delivery methods for children with SLI. This grant is designed to determine whether Enhanced Conversational Recast, as published by Plante et al., 2014, is most effectively delivered with massed or spaced recasts and to individual children or small groups.

R01DC004726-S1 Plante, E. (PI) 8/1/09-8/1/11.
ARRA supplement to *Receptive skills in developmental language Disorder.* This grant funded preliminary studies designed to translate principles of learning established on the parent grant to treatment studies. This work provided the preliminary studies for the current proposal.

R01 DC04726 Plante, E. (PI) 4/1/02-3/30/11.
Receptive skills in developmental language disorder. The project explored factors that facilitated or inhibited learning by adults with language learning disability and children and adults with SLI. Many of the studies demonstrated factors that facilitate and inhibit learning in SLI.

R01 HD42170-05 Gerken, LA. (PI), R. Gómez 5/1/04-4/30/10
Learning Mechanisms in Language Acquisition. The project explored factors that facilitate and inhibit learning in normal and impaired learners. This grant included studies of infants and of adults with language-based learning disabilities and tested the tenets of the Learning Mechanisms Theory.

Biosketch continued

- Add consultants
 - When you are new to an area
 - Make sure their biosketches warrant their role
- Do Not Pad
 - Follow the instructions
 - Leave relevant “submitted” manuscripts for the preliminary studies section
- F31/F32 biosketches have their own rules for what to include