

# CURRICULUM VITAE

## Frederick (Erick) J. Gallun

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## Education

- 2003 PhD in Psychology, University of California, Berkeley  
1993 BA in Psychology, Reed College, Portland, OR

## Grants

|   |           |
|---|-----------|
| VA RR&D, Career Development Award II          | 2007-2011 |
| NIH-NIDCD, R03, Small Grant Award             | 2007-2010 |
| VA RR&D, Associate Investigator Award         | 2006-2007 |
| Dudley Allen Sargent Research Fund            | 2005-2006 |
| NIH-NIDCD, Individual Postdoctoral Fellowship | 2004-2006 |

## Experience

### Research

|  |              |
|--|--------------|
| Research Assistant Professor, OHSU, Portland, OR | 2006-present |
| Research Investigator, NCRAR, Portland, OR       | 2006-present |
| Postdoctoral Fellow, Boston University           | 2004-2006    |
| Research Associate, Boston University            | 2003-2004    |
| Intern, Interval Research Corp., Palo Alto, CA   | 1998         |
| Graduate Student Researcher, UC Berkeley         | 1995 – 2003  |

### Teaching

|                                   |                   |
|-----------------------------------|-------------------|
| Lecturer                          |                   |
| <i>Psychoacoustics</i>            | Boston University |
| <i>Introduction to Psychology</i> | UC Berkeley       |

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| Graduate Student Instructor  |           |
| <i>Cognitive Psychology; Research Design and Data Analysis; Biological Psychology; Hearing</i> | 1996-1999 |

### Statistical and Computing Consultant

|                                  |                  |
|----------------------------------|------------------|
| McGill University                | 2001 –2003; 2006 |
| Dept. of Psychology, UC Berkeley | 2000 –2002       |

## Peer-Reviewed Publications

- Gallun, E. and Reisberg, D. (1995) "The role of expectation in attending to interleaved melodies," *Mus. Perc.*, 13(4).
- Bonnel, A., Mottron, L., Peretz, I., Trudel, M., Gallun, E. and Bonnel, A.-M. (2003) "Enhanced pitch sensitivity in individuals with autism: a signal detection analysis" *J. Cog. Neur.*, 15(2).
- Kidd, G., Jr., Mason, C. R. and Gallun, F. J. (2005) "Combining energetic and informational masking for speech identification," *J. Acoust. Soc. Am.*, 118(2), 982-992.
- Gallun, F. J., Mason, C. R. and Kidd, G., Jr. (2005) "Binaural release from informational masking in a speech identification task," *J. Acoust. Soc. Am.*, 118(3), 1614-1625.

- Durlach, N.I., Mason, C. R., Gallun, F. J., Shinn-Cunningham, B., Colburn, H.S. and Kidd, G., Jr. (2005) "Informational masking for simultaneous nonspeech stimuli: Psychometric functions for fixed and randomly mixed maskers" *J. Acoust. Soc. Am.*, 118(4), 2482-2497.
- Kidd, G., Jr., Arbogast, T. M., Mason, C. R. and Gallun, F. J. (2005) "The advantage of knowing where to listen" *J. Acoust. Soc. Am.*, 118(6), 3804-3816.
- Best, V., Ozmeral, E., Gallun, F.J., Sen, K. and Shinn-Cunningham, B.G. (2005) "Spatial unmasking of birdsong in human listeners: Energetic and informational factors" *J. Acoust. Soc. Am.*, 118(6), 3766-3773.
- Gallun, F. J. and Hafter, E. R. (2006) "Amplitude modulation as a mechanism for increment detection" *J. Acoust. Soc. Am.*, 119(6), 3919-3930.
- Plack, C. J., Gallun, F. J., Hafter, E. R., Raimond, A. (2006) "The detection of increments and decrements is not facilitated by abrupt onsets or offsets" *J. Acoust. Soc. Am.*, 119(6), 3950-3959
- Best, V., Gallun, F. J., Ihlefeld, A., and Shinn-Cunningham, B. G. (2006). "The influence of spatial separation on divided listening," *J. Acoust. Soc. Am.*, 120(3), 1506-1516.
- Best, V., Gallun, F. J., Carlile, S. and Shinn-Cunningham, B. G. (2007). "Binaural interference and auditory grouping," *J. Acoust. Soc. Am.*, 121(2), 1070-1076.
- Gallun, F. J., Mason, C.R. and Kidd, G., Jr. (2007) "Task-dependent costs in processing two simultaneous auditory stimuli" *Percept. Psych.* 69(5), 757-771.
- Durlach, N.I. and Gallun, F.J. (2007) "Theory construction in auditory perception: Need for development of teaching materials" *J. Acoust. Soc. Am.* 112(2), 1014-1016.
- Gallun, F. J., Mason, C.R. and Kidd, G., Jr. (2007) "The ability to listen with independent ears" *J. Acoust. Soc. Am.* 122, 2814-2825

## Book Chapters

- Hafter, E.R., Bonnel, A.-M., Gallun, E. and Cohen, E. (1998). "A role for memory in divided attention between two independent stimuli" In Palmer, A.R., Rees, A., Summerfield, A.Q. and Meddis, R. (Eds.) Psychophysical and Physiological Advances in Hearing Whurr, London, pp. 228-238.
- Gallun, E., Hafter, E. and Bonnel, A.-M. (2005) "Modeling the role of duration in intensity increment detection" In Pressnitzer, D., de Cheveigne, A., McAdams, S., and Collet, L. (Eds.) Auditory Signal Processing: Physiology, Psychoacoustics, and Models. Springer-Verlag, New York, pp. 221-229.
- Shinn-Cunningham, B.G., Best, V., Dent, M.L., Gallun, F.J., McClaine, E.M., Narayan, R., Ozmeral, E. and Sen, K. (2006) "Behavioral and neural identification of birdsong under several masking conditions" In B. Kollmeier, G. Klump, V. Hohmann, U. Langemann, M. Mauermann, S. Uppenkamp and J. Verhey (eds.) Hearing – From Sensory Processing to Perception. Berlin: Springer Verlag, pp. 207-214.
- Kidd, G., Jr., Mason, C. R., Richards, V. M., Gallun, F. J., Durlach, N. I. (2007) "Informational Masking" In Yost, W. (Ed.) Springer Handbook of Auditory Research, Vol. 29: Auditory Perception of Sound Sources. New York: Springer, pp. 143-190.

## Published Abstracts and Presentations

- Gallun, E. and Reisberg, D. (1995) The role of expectation in attending to interleaved melodies. *Proc. Soc. Music Perc. Cogn.*
- Hafter, E.R., Bonnel, A-M. and Gallun, F. (1996) "Detection of change without regard to its valence," *J. Acoust. Soc. Am.*, 98.
- Hafter, E., Bonnel, A.-M. and Gallun, E., (1998a) "Detection of change in an auditory stimulus: Psychophysical evidence for a central mechanism." *Assoc. Res. Otolaryngol. Abs.*: 804.
- Hafter, E.R., Bonnel, A-M and Gallun, E. (1998b) "Shared attention to simultaneous stimulation," *J. Acoust. Soc. Am.*, 103 (5)

- Gallun, E., Hafter, E. and Bonnel, A.-M. (1998) "The role of memory in the dual-task: Evidence from a frequency/amplitude judgment", *J. Acoust. Soc. Am.* 103 (5)
- Hafter, E., Bonnel, A.M., & Gallun, E. (1999) "Sharing attention and the kind of memory to which stimuli are compared." *Proceedings of the 4<sup>th</sup> Meeting of CSAIL*.
- Bonnel, A-M., Hafter, E. R. and Gallun, E. (2000) "The role of "trace" and "context" memories in shared attention," *Int. J. Psych.*, 35 (3-4)
- Gallun, E., Hafter, E., and Bonnel, A.-M. (2001) " Divided attention to dichotic auditory stimuli." *Assoc. Res. Otolaryngol. Abs.*: 20960.
- Bonnel, A.C., Mottron, L., Peretz, I., Bonnel, A.M, Trudel, M., Gallun, E. (2001). "Enhanced auditory sensitivity in individuals with autism: a signal detection analysis," *Société Québécoise de Recherche en Psychologie*, Chicoutimi.
- Bonnel, A.C., Mottron, L., Peretz, I., Bonnel, A.M, Trudel, M., Gallun, E. (2001). "Auditory perception in high-functioning individuals with autism: a signal detection analysis," *International Meeting for Autism Research*, San Diego, California.
- Hafter, E.R., Gallun, E., Bonnel, A-M, Edwards, B. and Viemeister, N. (2001) "Unsigned coding of stimulus change," *J. Acoust. Soc. Am.*, 109 (5)
- Gallun, E., Hafter, E.R., and Bonnel, A.-M. (2002) "Sensitivity to changes in amplitude envelope," *J. Acoust. Soc. Am.*, 111 (5)
- Gallun, E., Hafter, E.R., and Bonnel, A.-M. (2003) "The Role of the Envelope in the Detection of Intensity Increments," *Assoc. Res. Otolaryngol. Abs.*: 151
- Kidd, G., Mason, C.R., Gallun, F.J. (2004) "Nonadditivity of Energetic and Informational Masking II: Results from a Speech Identification Task" *Assoc. Res. Otolaryngol.Abs.*
- Gallun, F. J., Mason, C. R. and Kidd, G., Jr. (2004) "Binaural release from informational masking: Results from a speech identification task" *J. Acoust. Soc. Am.*, 115 (5),
- Gallun, F. J., Mason, C. R. and Kidd, G., Jr. (2005a) "Human perception of simultaneous dichotic speech streams" *Assoc. Res. Otolaryngol.Abs.*: 419.
- Ozmeral, E., Best, V., Gallun, F.J., Sen, K. and Shinn-Cunningham, B.G. (2005) "Identifying a bird in a chorus: How target and masker statistics influence spatial unmasking" *Assoc. Res. Otolaryngol.Abs.*: 957.
- Kidd, G., Jr., Arbogast, T. M., Mason, C. R. and Gallun, F. J. (2005) "The advantage of knowing where to listen" *J. Acoust. Soc. Am.*, 117 (4)
- Gallun, F. J., Mason, C. R. and Kidd, G., Jr. (2005b) "Processing two sources simultaneously: Switching or sharing?" *J. Acoust. Soc. Am.*, 117 (4)
- Kidd, G. Jr., Richards, V., Mason, C. R., Gallun, F. J., and Huang, R. (2006) " Simultaneous Two-Channel Signal Detection, Revisited" *Assoc. Res. Otolaryngol. Abs.*: 958.
- Gallun, F. J., Mason, C. R. and Kidd, G., Jr. (2006) "Contralateral Masking of Narrow Bands of Speech" *Assoc. Res. Otolaryngol. Abs.*: 558.
- Best, V., Bengani, P., Gallun, F. J., Shinn-Cunningham, B.G. (2006) "The Cost of Dividing Auditory Attention Between Two Spatial Locations" *Assoc. Res. Otolaryngol. Abs.*: 403.
- Gallun, F. J., Mason, C. R. and Kidd, G., Jr. (2006) "Informational masking: Effects of similarity and uncertainty for detection of a high-frequency amplitude-modulated tone" *J. Acoust. Soc. Am.*, 119: 3236
- Gallun, F.J. (2006) "Auditory attention: One term for several concepts?" *J. Acoust. Soc. Am.*, 119: 3415
- Dent, M., McClaine, E., Shinn-Cunningham, B., Best, V., Ozmeral, E., Gallun, F., Sen, K. and Narayan, R. (2006) "An avian cocktail party: Masking and unmasking in birds" *J. Acoust. Soc. Am.*, 120: 3152
- Gallun, F.J., Durlach, N.I., Colburn, H.S., Shinn-Cunningham, B.G., Best, V., Ihlefeld, A., Mason, C.R., and Kidd, G., Jr. (2007) "Binaural Release from Masking for a Tone in Noise and in Multitone Maskers" *Assoc. Res. Otolaryngol. Abs.*: 437.

- Best, V., Stupin, L., Gallun, F., Carlile, S., and Shinn-Cunningham, B.G. (2007) "Sequential Grouping Influences Binaural Interference" *Assoc. Res. Otolaryngol. Abs.*: 902.
- Dent, M., McClaine, E., Shinn-Cunningham, B., Best, V., Ozmeral, E., Narayan, R., Gallun, F., and Sen, K. (2007) "Spatial Unmasking of Birdsong by Budgerigars and Zebra Finches" *Assoc. Res. Otolaryngol. Abs.*: 909.
- Gallun, F.J. (2007) "On the limits of selective and divided auditory attention", *Proceedings of the 12<sup>th</sup> Meeting of CSAIL*.
- Gallun, F.J. (2007) "Hearing Loss and Informational Masking", Aging and Speech Conference, Indiana University, Bloomington, IN