
BIOGRAPHICAL SKETCH

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NAME Jacob J. Oleson	POSITION TITLE Associate Professor		
eRA COMMONS USER NAME (credential, e.g., agency login) OLESONJ			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Central College	B.A.	1997	Mathematics
University of Missouri – Columbia	M.A.	1999	Statistics
University of Missouri – Columbia	Ph.D.	2002	Statistics

A. Personal Statement.

B. Positions and Honors.

Professional Positions

- 2002-2004 Assistant Professor, Dept of Mathematics and Statistics, Arizona State University, Tempe, AZ
- 2004-2012 Assistant Professor, Dept of Biostatistics, University of Iowa, Iowa City, IA
- 2012-present Associate Professor, Dept of Biostatistics, University of Iowa, Iowa City, IA
- 2014-present Director, Center for Public Health Statistics, University of Iowa, Iowa City, IA

Honors

- 1997-2002 President 2 years, Vice-president 1 year, member 5 years, Statistics Graduate Student Assoc.
- 2000 Recipient of the Donald K. Anderson Graduate Student Teaching Award
- 2002 Recipient of the Donald K. Anderson Graduate Research Assistant Award

C. Selected peer-reviewed publications (in chronological order).

1. Jiang D, Oleson JJ. (2011) Simulation study of power and sample size for repeated measures with multinomial outcomes: An application to sound direction identification experiments (SDIE). *Statistics in Medicine*, 20(19), 2451-2466. PMC: PMID: 21751232, PMID: PMC3339260
2. Gfeller K, Turner C, Oleson JJ, Kliethermes SA, Driscoll V, Gantz BJ. (2012) Accuracy of cochlear implant recipients on speech reception in background music. *Annals of Otology, Rhinology & Laryngology*, 121, 782-791.
3. Holte L, Walker E, Oleson JJ, Spratford M, Moeller MP, Roush P, Tomblin JB. (2012) Factors influencing follow-up to newborn hearing screening for infants who are hard-of-hearing. *American Journal of Audiology*, 21, 163-174. PMC: PMID: 22585937, PMID: PMC3435452
4. Stanier C, Singh A, Adamski W, Baek J, Caughey M, Carmichael G, Edgerton E, Kenski D, Koerber M, Oleson JJ, Rohlf T, Lee SR, Riemer N, Shaw S, Sousan S, Spak S. (2012) Overview of the LADCO Winter Nitrate Study: Hourly ammonia, nitric acid and PM2.5 composition at an urban and rural site pair during PM2.5 episodes in the U.S. Great Lakes Region. *Atmospheric Chemistry and Physics Discussions*, 12, 11037-11056.
5. Oleson JJ, Wikle CK. (2012) Predicting Infectious Disease Outbreak Risk Via Migratory Waterfowl Vectors. *Journal of Applied Statistics*, 40(3), 656-673.
6. Gfeller K, Jiang D, Oleson JJ, Driscoll V, Olszewski C, Knutson JK, Turner C, Gantz BJ. (2012) The effects of musical and linguistic components in recognition of real-world musical excerpts by cochlear implant recipients and normal hearing adults. *Journal of Music Therapy*, 49(1), 68-101. PMC: PMID: 22803258, PMID: PMC3400117

7. Porter AT, Oleson JJ. (2013) A path-specific SEIR model for use with general latent and infectious distributions. *Biometrics*, 69(1), 101-108. PMC: PMC3622117, PMID: 23323602
8. McGregor K, Oleson JJ, Bahnsen A, Duff D. (2013) Children with Developmental Language Impairment Have Vocabulary Deficits Characterized by Limited Breadth and Depth. *International Journal of Language & Communication Disorders*, 48(3), 307-319.
9. Walker EA, Sprattford M, Moeller MP, Oleson JJ, Ou H, Roush P, Jacobs S. (2013) Predictors of hearing aid use time in children with mild-severe hearing loss. *Language, Speech, and Hearing Services in Schools*, 44, 73-88. PMC: PMID: 22869089, PMID: PMC3543484
10. Oleson JJ, Kumar N, Smith BJ. (2013) Spatio-temporal modeling of irregularly spaced Aerosol Optical Depth data. *Environmental and Ecological Statistics*, 20(2), 297-314.
11. Smith RS, Driscoll VD, Gfeller K, Kliethermes SA, Oleson JJ. (2013) Speech Intonation and Melodic Contour Recognition in Children with Cochlear Implants and with Normal Hearing. *Otology and Neurotology*, 34(3), 490-498. PMC: 23442568, PMID: PMC3600096
12. Chrisman M, Nothwehr F, Yang YZ, Oleson JJ. (2014) Environmental influences on physical activity in rural midwestern adults: A qualitative approach *Health Promotion Practice*, epub ahead of print. PMID: 24662894
13. Dunn CC, Walker EA, Oleson JJ, Kenworthy M, Van Voorst T, Tomblin JB, Ji H, Kirk KI, McMurray B, Hanson M, Gantz BJ. (2014) Longitudinal speech perception and language performance in pediatric cochlear implant users: The effect of age at implantation. *Ear and Hearing*, 35(2), 148-160. PMC: PMC3944377, PMID: 24231628
14. Chrisman M, Nothwehr F, Yang G, Oleson JJ. (2014) Perceived correlates of domain-specific physical activity in rural adults in the Midwest. *The Journal of Rural Health*, epub ahead of print. PMID: 24576053
15. Ambrose SE, Berry LM, Walker EA, Harrison M, Oleson JJ, Moeller MP. (2014) Speech sound production in two-year-olds who are hard of hearing. *American Journal of Speech-Language Pathology*, epub ahead of print. PMID: 24686852

D. Research Support

Ongoing Research Support

5 R01 DC009560 08/01/08-07/31/18

NIH-NIDCD

Outcomes of School-Age Children Who are Hard of Hearing

PI: Tomblin, Bruce

Biostatistician: Oleson, Jacob

The grant will help UI researchers, along with colleagues at Boys Town National Research Hospital in Nebraska and the University of North Carolina, explore whether educational and audiological services and aids can improve outcomes for young children with mild and moderate hearing disorders.

5 R01 DC011742 01/23/12-12/31/16

NIH-NIDCD

Memory and Word Learning

PI: McGregor, Karla

Role: Co-Investigator

The long-term goal of this research program is to develop a full explanation of the vocabulary problems associated with developmental language impairment (LI). The current objective is to examine three memory processes that support word learning: encoding, consolidation, and retrieval.

5 P50 DC000242 02/15/12-01/31/17

NIH-NIDCD

Iowa Cochlear Implant Clinical Research Center Project VI

PI: Gantz, Bruce
Role: Biostatistician

Grant funds allow researchers to continue to identify the factors that determine why some individuals benefit to a greater extent from the implant than others. In addition, researchers work to develop and evaluate new signal processing for speech perception and music appreciation and to study the expansion of selection criteria including adults with more hearing and to track the benefit of early implantation in infants.

5 R01 DC012082 08/01/12-07/31/15
NIH-NIDCD

Evoked Potential and Music Perception: Effects of Hearing Loss and Training

PI: Brown, Carolyn
Role: Biostatistician

This research will (a) improve our understanding of how complex sounds such as music and speech in noise are processed within the auditory system of hearing aid and cochlear implant users, and (b) evaluate interventions designed to improve their perception of these spectrally complex signals. We will do this by examining how (and whether) participation in music-based auditory training programs enhance perception and enjoyment of music and whether or not they generalize to perception of speech in noise. Results may lead to the development of more effective rehabilitation strategies for HA and CI users.

5 T15 HL097622 08/20/09-02/28/16
NIH

Iowa Summer Institute in Biostatistics (ISIB)

PI: Chaloner, Kathryn
Role: Co-Investigator

There is a nationwide shortage of biostatisticians and the shortage is having a negative impact on medical and public health research. The goal of this proposed program is to increase the number of minority undergraduates who enter graduate programs in Biostatistics or related areas. Instruction will be through case-based instruction of real biomedical research; computer laboratory training; projects; and clinical and translational research enrichment activities.

1 R01 DC-13591 12/1/13-11/30/14

NIH-NIDCD/Father Flanagan's Boys Home

Complex listening Skills in School-Age Children Who are Hard of Hearing

PI: McCreery, Ryan; Walker, Elizabeth (Contact PI)
Role: Biostatistician

The long-term goal of this research program is to optimize amplification and speech understanding in children who are hard of hearing (CHH) by identifying the underlying processes that support listening in academic and social situations. The objective of this proposal is to examine how inconsistent auditory experience during early childhood affects speech understanding in noise and reverberation. The current proposal will also examine how linguistic and cognitive skills may help minimize the negative consequences of limited auditory experience by providing skills that support listening under degraded acoustic conditions.

No Contract #: IPA-VA Oleson MOU 4/1/14-3/31/15
DOD

Cochlear Implants

PI: Hansen, Marlan
Role: Contact PI

CDC RFA-DD14-001, Surveillance and Research of Muscular Dystrophies and Neuromuscular Disorders, Component A: Core (Existing MD Surveillance and Research Programs).

Completed Research Support

Smart Start

09/30/04-08/31/07

SSA-OPDR-03-01 (Jack Hillyard)

Univ. Iowa Centers of Disabilities & Development (SSA Cooperative Agreement with the CDC)

PI of subcontract: Pendergast, Jane.

Co-Investigator: Oleson, Jacob

This is a study of an intervention designed to facilitate meeting the needs of adolescents and young adults as they transition out of the school system. The intent is to enable them to go on to post-secondary education or take on some level of employment.

American Statistical Association Biometrics Section

2008-2009

Developing the Next Generation of Biostatisticians: The Iowa Field of Dreams Conference 2009

PI: Oleson, Jacob

Conference grant will provide funding for 3-5 minority students to attend this conference.

5 R01 DK074715-04

09/15/07-07/31/12

Cognitive Function in Dialysis Patients: Ancillary Study to the FHN Trial

NIH-NIDDK

PI: Stokes, John

Co-PI: Oleson, Jacob