

## ALEXANDER P. DEMOS, PH.D.

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### CURRENT POSITION

University of Illinois Chicago, Department of Psychology 2021 - Present  
Clinical Associate Professor  
Brain and Cognitive Sciences & Statistics, Methods, and Measurement Core

### EDUCATION

University of Connecticut, Storrs, CT  
Ph.D., Psychology (Perception, Action, and Cognition) 2013  
New York University, New York, NY  
M.A., Psychology (Cognition) 2006  
B.A., Major: Psychology, Minors: Chemistry & Biology 2003

### PROFESSIONAL EXPERIENCE

University of Illinois Chicago, Chicago, IL  
Clinical Assistant Professor, Department of Psychology 2018 - 2021  
Visiting Assistant Professor, Department of Psychology 2015 - 2018  
McGill University, Montreal, Canada  
Postdoctoral Fellowship, Auditory Cognitive Neuroscience 2013 - 2015  
Professional Examination Service, New York, NY  
Psychometrics Consultant 2008 - 2013  
Barnard College, Columbia University, New York, NY  
Associate, Department of Psychology 2007 - 2008  
Professional Examination Service, New York, NY  
Psychometrics Research Associate 2004 - 2008

### GRANTS ONGOING

Agency	PI	Role	Amount	Years
Spencer Foundation	Del Tufo	Co-PI	\$50,000 [Total]	2021-2023

*The interaction of racial equity and timeseries methods.*

Develop an interdisciplinary workshop to bring together educators and methodologists to adapt timeseries methods to the study of racial equity in education.

NIMH R01: 1R01MH120168-01A1	Ajilore, Leow	Co-I	\$3,006,382 [Total]	2020-2024
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*Unobtrusive monitoring of affective symptoms and cognition using keyboard dynamics.*

The study will use a novel smartphone technology ("BiAffect") that uses typing dynamics and motor kinematics to unobtrusively, securely, and passively monitor cognitive function in a transdiagnostic sample of participants with mood disorders.

NIH NIA R01 R01AG070956	Marquine, Moore	Co-I	\$3,916,171 [Total]	2021-2026
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*Identifying digital phenotypes of risk for Alzheimer's disease and related dementias among Hispanics/Latinos*

NIH NEI R01: Schneider Co-I \$1,915,000 2018-2023  
5R01EY028266 [Total]

*Directly testing the magnocellular theory of dyslexia*

The magnocellular theory of dyslexia will be tested using high-resolution functional magnetic resonance imaging to measure thalamic function in each of three independent aims. The results will help guide the allocation of future resources in understanding and treating dyslexia.

Supplement to NIMHD R01: Marquine, Co-I \$417,599 2020-2022  
3R01MD013502-03S1 Moore [Total]

*Mechanisms of Disparities in Adverse Neurocognitive Outcomes among Hispanics Aging with HIV*

This supplement application aims to investigate whether an innovative smartphone technology based on keystroke metadata can detect risk for developing AD in Hispanics with and without HIV.

NIH/NIDCD R03: Del Tufo Consultant \$173,708 2021-2023  
1R03HD104051 [Total]

*Neurobiology of Reading Compensation*

Determine and predict the intra-individual impact of neurobiological compensatory mechanisms on reading development.

#### GRANTS COMPLETED

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NSERC Create - Auditory Cognitive Palmer Post-Doctoral \$20,000 2014  
Neuroscience Fellow [Direct]

*The Dynamics of sensorimotor synchronization of expressive ensemble performance.*

The purpose of this grant was to develop a computational model to test sensorimotor synchronization.

NSERC Create - Auditory Cognitive Palmer Post-Doctoral \$20,000 2013  
Neuroscience Fellow [Direct]

*Sensorimotor Synchronization of Ensemble Performance: A Perturbation Approach.*

The purpose of this grant was to develop a behavioral study to test dynamical systems theories of sensorimotor synchronization.

#### GRANTS IN REVIEW

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IES NCSER Del Tufo Co-I \$1,700,000 Submitted 10/22  
*Project Persist: Accommodations that increase self-regulated learning catalyze the postsecondary persistence of students with learning disabilities*

The purpose of this grant was to identify the accommodations received by postsecondary students with learning disabilities increased self-regulated learning which, in turn, catalyzed postsecondary persistence and graduation.

NIH NIA (PAR-21-100) Demos PI \$3,547,9778 Submitted 2/23  
[Total]

*Does Music Reduce Cognitive Decline*

Our goal is to use passive and unobtrusive daily measures from smartphones and smartwatches coupled with in-lab measurements and neuroimaging to understand how aging professional musicians show superior healthy aging relative to a matched control group of active professional nonmusicians using propensity-score matching. *Proposed Dates: 10-23-9/28*

**PEER-REVIEWED ARTICLES**

\* indicates a graduate student, # indicates an undergraduate student.

- \*Ross, M. K., Tulabandhula, T., Bennett, C. C., Baek, E., Kim, D., Hussain, F., **Demos A.P.**, \*Ning, E., Langenecker, S.A., Ajilore, O. & Leow, A. (2023). A Novel Approach to Clustering Accelerometer Data for Application in Passive Predictions of Changes in Depression Severity. *Sensors*, 23(3), 1585.
- Chen, M.H., Leow, A., \*Ross, M.K., DeLuca, J., Chiaravalloti, N., Costa, S.L., Genova, H.M., Weber, E., Hussain, F. & **Demos, A.P** (2022). Associations between smartphone keystroke dynamics and cognition in MS. *Digital Health*, 8, 20552076221143234.
- Bégel, V., **Demos, A.P.**, Wang, M., & Palmer, C. (2022). Social interaction and rate effects in models of musical synchronization. *Frontiers in Psychology*, 13, 2832.
- \*Melton, Z.J, Chaffin, R, \*Kangas-Dick, K., Marsh, K.L. & **Demos, A.P.** (2022). Synchronizing to a friendly stranger. *Quarterly Journal of Experimental Psychology*.  
<https://doi.org/10.1177/17470218221094306>
- Palmer, C. & **Demos, A.P.** (2022). Are we in time? How predictive coding and dynamical systems explain human synchrony. *Current Directions in Psychology*, 31(2), pp.147-153,  
<https://doi.org/10.1177/09637214211053635>
- \*Rashidisabet, H., Ajilore, O., Leow, A., & **Demos, A.P.** (2022). Characterizing naturalistic human communication dynamics through in-the-wild passive and unobtrusive typing dynamics data. *Physica A: Statistical Mechanics and its Applications*, 599, 127384.
- Rowen, J., Giedgowd, G., & **Demos, A.P.** (2022). Effectiveness of Videoconferencing Psychotherapy Delivered by Novice Clinicians in a Training Clinic. *Training and Education in Professional Psychology*.
- Berenz, E.C., \*Zakeri, S.E, **Demos, A.P.**, \*Paltell, K.C, Kevorkian, S., \*Bing-Canar, H., & \*Raney, R. (2021). Negative affect and alcohol craving in trauma-exposed young adult drinkers. *Alcoholism: Clinical and Experimental Research*, 45(7), 1479-1493.
- Buffington, J., **Demos, A.P.**, & Morgan-Short, K. (2021). The reliability and validity of procedural memory assessments used in second language acquisition research. *Studies in Second Language Acquisition*. 1-28. doi: 10.1017/S0272263121000127
- Chaffin, R., Ginsborg, J. & Dixon, J., & **Demos, A.P.** (in Press). Musical structure as a hierarchical retrieval organization: Serial position effects in memory for performed music. *Musicae Scientiae*.
- \*Lokey, S.B., \*Iwanski, C, **Demos, A.P.** & Herbener, E.S. (2021). Individuals with schizophrenia display behaviour inconsistent with learned social impressions during a gambling task. *British Journal of Clinical Psychology*, 60(2), 149-159.
- Ross, M., **Demos, A. P.**, Zulueta, J., Piscitello, A., Langenecker, S. A., McInnis M.G., Ajilore O., Nelson, P. N, Ryan, K.A., & Leow, A. (2021). Naturalistic Smartphone Keyboard Typing Reflects Processing Speed and Executive Function. *Brain and Behavior*, 11(11), e2363.
- \*Sherman, S. R., Holmes, C. J., **Demos, A. P.**, Stone, T., Hornikel, B., MacDonald, H. V., Fedewa, M.V., & Esco, M. R. (2021). Vagally Derived Heart Rate Variability and Training Perturbations with Menses in Female Collegiate Rowers. *International journal of sports physiology and performance*, 1(aop), 1-8.
- Zamm, A., Palmer, C., Bauer, A.K., Bleichner, M.G., **Demos, A.P.**, & Debener, S. (2021) Electrophysiological signatures of interpersonal synchrony captured with mobile EEG. *Frontiers in Neuroscience*,  
<https://doi.org/10.3389/fnhum.2021.717810>.
- Zulueta, J., **Demos, A.P.**, \*Vesel, C., \*Ross, M., Piscitello, A.J., Langenecker, S., Young, McInnis, M. Nelson, P., Ryne, K, Leow, A. & Ajilore, O. (2021). The effects of bipolar disorder risk on a mobile phone keystroke dynamics based biomarker of brain age. *Frontiers in Psychiatry*, 12: 739022.  
<https://doi.org/10.3389/fpsy.2021.739022>
- \*Bing-Canar, H., **Demos, A. P.**, Mermelstein, R. J., & Berenz, E. C. (2020). Evaluating the influences of major depression and posttraumatic stress disorder on trauma and alcohol cue reactivity. *Addictive Behaviors*, 112, 106596.
- \*Christofalos, A.L., Raney, G.E, Daniel, F., & **Demos, A.P.** (2020). A Coherent Situation Model Guides Processing and Repetition Effects. *Journal of Research in Reading*, 43(4), 417-433.

- \*Vesel, C., \*Rashidisabet, H., Zulueta, J., Stange, J., Duffecy, J., Hussain, F. Piscitello, A., \*Bark, J., Langenecker, S., Young, S., Mounts, E., Omberg, L., Nelson, P., Moore, R.C., Koziol, D., Bourne, K., Ajilore, O., **Demos, A.P.** & Leow, A. (2020). Effects of mood and aging on keystroke dynamics metadata and their diurnal patterns in a large open-science sample: A BiAffect iOS study. *Journal of the American Medical Informatics Association*, 27(7), 1007-1018.
- \*Miller, K. A., Raney, G. E., & **Demos, A. P.** (2020). Time to Throw in the Towel? No Evidence for Automatic Conceptual Metaphor Access in Idiom Processing. *Journal of Psycholinguistic Research*, 49(5), 885-913.
- Demos, A.P.**, \*Layeghi, H., Wanderley, M.M., & Palmer, C. (2019). Staying together: A bidirectional delay-coupled approach to joint action. *Cognitive Science*, 43(8), e12766. doi:10.1111/cogs.12766.
- Zamm, A., Palmer, C., Bauer, A-K., Bleichner, M.G., **Demos, A.P.**, & Debener, D. (2019). Synchronizing MIDI and wireless EEG measurements during natural piano performance. *Brain Research*, 1716, 27-38. doi:10.1016/j.brainres.2017.07.001.
- Demos, A.P.**, Lisboa, T., Begosh, K., Logan, T., & Chaffin, R. (2018). A longitudinal study of the development of expressive timing. *Psychology of Music*, 48, 50-66. doi:10.1177/0305735618783563.
- Demos, A.P.**, & Chaffin, R. (2018). How Music Moves Us: Entraining to musicians' movements. *Music Perception: An Interdisciplinary Journal*, 35(4), 405-424. doi:10.1525/mp.2018.35.4.405.
- Lisboa, T., **Demos, A.P.**, & Chaffin, R. (2018). Training thought and action for virtuoso performance. *Musicae Scientiae*, 22(4), 519-538. doi:10.1177/1029864918782350.
- \*Zamm, A., Debener, S., \*Bauer, A.K., Bleichner, M.G., **Demos, A.P.**, & Palmer, C. (2018). Correlational approaches for measuring interbrain synchrony in performing musicians. *New York Academy of Sciences*, 1423(1), 251-263. doi:10.1111/nyas.13738.
- Demos, A.P.**, \*Carter, D.J., Wanderley, M.M., & Palmer, C (2017). The unresponsive partner: Roles of social status, auditory feedback, and animacy in coordination of joint music performance. *Frontiers in Psychology*, 149(8). doi:10.3389/fpsyg.2017.00149
- Demos A.P.**, Chaffin, R., & Logan, T. (2017). Musician's body movements embody musical structure and expression: A dynamical systems approach. *Musicae Scientiae*, 2(22), 244-263. doi:10.1177/10298649.
- Motyl, M., **Demos, A. P.**, \*Carsel, T. S., \*Hanson, B. E., \*Melton, Z. J., \*Mueller, A. B., \*Prims, J. P., \*Sun, J., \*Washburn, A. N., \*Wong, K., \*Yantis, C. A., & Skitka, L. J. (2017). The state of social and personality science: Rotten to the core, not so bad, getting better, or getting worse? *Journal of Personality and Social Psychology*, 113(1), 34. doi:10.1037/pspa0000084.
- Demos, A.P.**, Lisboa, T., & Chaffin, R. (2016). Flexibility of expressive timing in repeated musical performances. *Frontiers in Psychology*, 1490(7). doi:10.3389/fpsyg.2016.01490.
- Demos, A.P.**, & Chaffin, R., & Kant, V. (2014). Towards a dynamical systems theory of music performance. *Frontiers in Psychology*, 477(5). doi:10.3389/fpsyg.2014.00477.
- Lisboa, T., Chaffin, R. & **Demos, A.P.** (2014). Recording thoughts while memorizing music: a case study. *Frontiers in Psychology*, 1561(5). doi:10.3389/fpsyg.2014.01561.
- Demos, A.P.**, Chaffin, R., \*Begosh, K. T., \*Daniels, J. R., & Marsh, K. L. (2012). Rocking to the beat: Effects of music and partner's movements on spontaneous interpersonal coordination. *Journal of Experimental Psychology: General*, 141(1), 49-53. doi:10.1037/a0023843.
- Ginsborg, J., Chaffin, R., & **Demos, A.P.** (2012). Different roles for prepared and spontaneous thoughts: A practice-based study of musical performance from memory. *Journal of International Music Studies*, 6, 201-231. doi:10.4407/jims.2014.02.005.

### PEER-REVIEWED BOOK CHAPTERS

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- Hussain, F., Stange, J. P., Langenecker, S. A., McInnis, M. G., Zulueta, J., Piscitello, A., Ross, M., **Demos, A.P.**, Vesel, C., Rashidisabet, H., Cao, B., Huang, H., Yu, P.S., Nelson, P., Ajilore, O., & Leow, A. (2023). *Passive sensing of affective and cognitive functioning in mood disorders by analyzing keystroke kinematics and speech dynamics*. In *Digital Phenotyping and Mobile Sensing* (pp. 229-258). Springer, Cham.
- Demos, A.P.**, & Chaffin, R. (2017). *Removing obstacles to the analysis of movement in musical performance: Recurrence, mixed models, and surrogates*. In M. Lesaffre, P-J. Maes & M. Leman (Eds). *The Routledge companion to embodied music interaction*. Routledge, New York, NY.
- Chaffin, R., **Demos, A.P.**, & Logan, T. (2016). *Performing from memory*. In S. Hallam, I. Cross, & M. Thaut (Eds.), *The Oxford handbook of music psychology*, 2nd Ed., (pp. 359-371). Oxford: Oxford University Press.

### PEER REVIEWED CONFERENCE PROCEEDINGS

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- \*Ning, E., Cladek, A. \*Ross, M. K., Kabir, S., Barve, A., Kennelly, E., Hussain, F., Jennifer, D., Langenecker, S. L., Nguyen, T. Tulabandhula, T.T., Zulueta, J., Ajilore, O., **Demos, A.P.**, & Leow, A. (2023). Smartphone-derived Virtual Keyboard Dynamics Coupled with Accelerometry as a Window into Understanding Brain Health. *Computer-Human Interaction (CHI 2023)*, Hamburg, Germany.
- \*Scheurich, R., **Demos, A.P.**, Zamm, A., Mathias, B., & Palmer, C. (2019). Capturing intra- and inter-brain dynamics with recurrence quantification analysis. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Meeting of the Cognitive Science Society* (pp. 2748-2754). Montreal, QC: Cognitive Science Society.
- Shaw, A., **Demos, A.P.**, Arthur, D., & Magnuson, J.S. (2011). Individual differences and lexical learning: Links to memory for faces, things and words. In L. Carlson, C. Hoelscher, & T.F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 3343-3348). Austin, TX: Cognitive Science Society.

### TECHNICAL REPORTS, REVIEWS & COMMENTARIES

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- \*Carsel, T., **Demos, A.P.**, & Motyl, M. (2018). Strong theorizing is needed to improve replicability in psychological science. *Behavioral and Brain Sciences*, 41. doi:10.1017/s0140525x1800078x
- Chaffin, R., & **Demos, A.P.** (2012). Review of 'Psychology of music: From sound to significance'. *Psychomusicology: Music, Mind, and Brain*, 22(1), 55-56.
- Roth, J., Somma, R., Greenberg, S. & **Demos, A.P.** (2006). Developing and implementing a certification program to drive change in the pharmaceutical industry. *Pharmaceutical Engineering*, May/June 2006.

### ONLINE BOOKS AND BOOK CHAPTERS

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- Demos, A.P.** & \*Salas, C. (Updated 2017). *A language not a letter: learning statistics in R*. <http://ademos.people.uic.edu/index.html>
- Demos, A.P.** & Chaffin, R. (2014). *Body movements*. In W. Thompson (Ed.), *Music in the social and behavioral sciences: An encyclopedia*. (Vol. 2, pp. 145-148). Thousand Oaks, CA: SAGE Publications, Inc.

### MANUSCRIPTS UNDER REVIEW/IN REVISION

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- Demos, A.P.**, & Palmer, C. Social and nonlinear dynamics unite: Musical group synchrony.
- Demos, A.P.**, Del Tufo, S.N., \*Ning, E., Marsh, K.L., Theodore, R. & Chaffin, R. Spontaneous interpersonal synchronization in dyslexia.
- \*Borowski, T.G., \*Carsel, T. & **Demos, A.P.** Jazz Hands: Dance Instruction, Synchrony, and Social Outcomes.

**TEACHING**

Graduate	<b>University of Illinois at Chicago</b>	<b>Times</b>	<b>Years</b>
	Research Design & Analysis I [ANOVA]	7	2015-2022
	Computing for Design & Analysis [R]	5	2015-2020
	Research Design & Analysis II [Regression]	3	2016-2020
	R-programming	2	2016-2017
	Mixed Effect Models	1	2018
	Data Science in R	2	2020,2022
Undergrad	<b>University of Illinois at Chicago</b>	<b>Times</b>	<b>Years</b>
	Statistics for the Behavioral Sciences	6	2015-2021
	Research Methods	1	2016
	Music Cognition [Honors Course, <i>co-taught class</i> ]	3	2018-2021
	Sensation & Perception	2	2019-2021
	<b>University of Connecticut</b>		
	Statistics for the Behavioral Sciences	7	2009-2013
	Introduction to Psychology	1	2012
	Music Cognition	1	2011
	Cognitive Psychology	1	2011
	<b>Barnard College of Columbia University</b>		
	Statistics for the Behavioral Sciences	2	2007-2008

**MENTORING**

PHD - *University of Illinois Chicago*

Zach Melton, Spring 2019-Fall 2022 [Social]: Social Synchrony & Social Identity (Defended)

Emma Ning, Started Fall 2021 [Quantitative]: Emotions & Music Performance

## PHD &amp; MA COMMITTEES

<b>Candidate, University</b>	<b>Start Year</b>	<b>Area</b>	<b>Status</b>
Brittany Hanson, <i>UIC</i>	2018	Social, PhD	Completed
Teresa Browoski, <i>UIC</i>	2018	Community, MA	Completed
Joshua Buffington, <i>UIC</i>	2018	Cognitive, MA	Completed
Mark Brow, <i>UIC</i>	2019	M.E.S.A., PhD	Completed
Tim Carsel, <i>UIC</i>	2019	Social, PhD	Completed
Colin Iwanski, <i>UIC</i>	2019	Clinical, PhD	Completed
Alyssa Blair, <i>UIC</i>	2019	Cognitive, PhD	Ongoing
Noor Elagha, <i>UIC</i>	2020	Cognitive, MA	Completed
JP Prims, <i>UIC</i>	2020	Social, PhD	Completed
Katie Bessette, <i>UIC</i>	2020	Clinical, PhD	Completed
Ye Shen, University of Delaware	2021	Education, PhD	Completed
Kristel Crombé, University of Ghent	2021	Musicology, PhD	Ongoing
Sushma Rameshkumar, <i>UIC</i>	2021	Clinical, PhD	Ongoing
Kathryn Howard, <i>UIC</i>	2022	Social, PhD	Ongoing

## UNDERGRAD MENTORING

*\*indicates a completed honors thesis/capstone.*

<b>Name</b>	<b>University</b>	<b># Sem</b>	<b>Start</b>	<b>Project</b>
Roshni Jacob	UIC	1	Fall 2022	Emotional Synchrony
Holden Davall	UIC	1	Fall 2022	Perceived Synchronization
Christen Delgado*	UIC	2	Fall 2021	Perceived Synchronization
Indira Reinert	UIC	4	Fall 2018	Synchronization & SEL
Samantha Carter	UIC	4	Fall 2018	Synchronization & SEL
Ryan Gleason	UIC	1	Spring 2018	Power analysis package in R
Daniel Carter*	McGill	3	Spring 2014	Dynamics of synchronization
Ruby Dixon	McGill	1	Spring 2014	Synchronization in performance
Jasmine Caban	UCONN	2	Spring 2013	Synchronization in dyslexia
Kayleigh Kangas*	UCONN	6	Fall 2010	Intentional synchronization
Katherine Alfred*	UCONN	6	Fall 2010	Spontaneous synchronization
Andrea Melms	UCONN	4	Fall 2010	Expert memory in performance
Caitlin Cuskley	UCONN	2	Fall 2009	Memory landmarks
Alexander Stackpole	UCONN	2	Fall 2009	Spontaneous entrainment
Jared Marinuzzi	UCONN	2	Fall 2009	Spontaneous entrainment
Alexandra Lewis	UCONN	2	Spring 2008	Spontaneous synchronization

**QUANTITATIVE SERVICE AND RESOURCES DEVELOPED***WORKSHOPS GIVEN*

- Interception of Racial Equality and Time Series Methods, University of Delaware, with Stephanie Del Tufo, Janine de Novais, Ed.D. July 2022
- Analyzing coordination in human behavior: a dynamical system's approach. [Recurrence quantification]. Ghent University, Belgium, with Moreno Coco, PhD. April 2017
- Mixed Models - A Crash Course. McGill University, Canada April 2015

*STATISTICAL RESOURCES**Online Open Access Course:*

- ANOVA. <http://www.alexanderdemos.org/ANOVA.html>
- Regression. <http://www.alexanderdemos.org/Overview.html>
- Mixed Models. <http://www.alexanderdemos.org/Mixed.html>

*SYMP. Study Your Music Practice.* [Built in Excel]: The program allows anyone interested in transcribing music practice to readily obtain graphic summaries and statistics showing how their practice was organized. <http://musiclab.uconn.edu/symp-2/>

*CONSULTING*

- Department of Psychology, Statistics Consultant for Graduate Students and Faculty 2015 - Present
- Dr. Frank Musiek's Neuroaudiology Lab, Storrs, CT, Department of Communication Disorders 2012 - 2013

**QUANTITATIVE SKILLS AND TRAINING**

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*SPECIAL TRAINING*

APA's Advanced Training Institute: *Nonlinear Methods for Psychological Science*, University of Cincinnati Summer 2010

*ADVANCED SKILLS*

*Languages & Programs*: MATLAB, R, SPSS, Markdown, LaTeX

*Data Analysis*: Mixed Effects Models, Circular Statistics, Dyadic Data Analysis, Non-Linear Methods (e.g., RQA, fractals), Time-Series Analysis, and Signal Processing.

**REVIEWER**

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*EDITORIAL BOARD*

Review Editor for *Frontiers in Psychology: Performance Science* 2018 - 2020

*AD HOC*

*Methods Journals*: Behavioral Research Methods, Physica A

*Experimental Journals*: Journal of Experimental Psychology: General, Journal of Experimental Social Psychology, Frontiers in Neuroscience, Scientific Reports, Psychological Research, Acta Psychologica, Cognition, Neuropsychologia

*Music and Arts Journals*: Music Perception, Musicae Scientiae, Music & Science, Journal of the Creativity, Aesthetics, and the Arts.

**COMMITTEES**

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Cognitive and Brain Sciences Division Search Committee	2022-Present
Cognitive and Brain Sciences Division Steering Committee	2022-Present
In'SYNC committee (form a new Cognitive and Brain Sciences Division)	2021-2022
Quantitative Clinical Assistant Professor Search Committee	2021
Behavioral Neuroscience Assistant Professor Search Committee	2021
Evaluate Department Division Structure	2021
Social Sciences Quantitative Lab Redesign	2019 - 2020
Faculty Senator. Elected. 3-year term	2019 - 2021
Quantitative Visiting Assistant Professor Search Committee	2019
Committee to develop an MA program in Social Data Science (between Psychology, Sociology, & Communications)	2017

**INVITED TALKS**

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*Perceived Synchrony on Social Bonding*. SEE Lab, University of Connecticut, April 9<sup>th</sup>, 2022.

*Examining the Relationship between Dyslexia, Music Performance and Synchrony*. CLaME Lab, New York University, December 4<sup>th</sup>, 2020.

*Developing Linear Mixed-Effect Models for Joint Action Research*. SOMBY lab, Central European University, November 20<sup>th</sup>, 2020.

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**CONFERENCE PRESENTATIONS & PROCEEDINGS**

- Demos, A.P.**, & Palmer, C. (2022). Birds flock; insects swarm; musicians affiliate. Musical Togetherness Symposium (MTS-22), 13-15 juillet (Vienne, Autriche)
- Bégel, V., **Demos, A.P.**, & Palmer, C. (2022). Duet synchronization interventions affect social interactions. Musical Togetherness Symposium (MTS-22), 13-15 juillet (Vienne, Autriche)
- Bégel, V., **Demos, A.P.**, & Palmer, C. (2021). Do we make good partners? Delay-coupling models of auditory-motor synchronization in a turn-taking context. Presentation submitted to 16th International Conference on Music Perception and Cognition jointly organized with the 11th triennial conference of ESCOM, Sheffield, UK.
- Bégel, V., **Demos, A.P.**, & Palmer, C. (2021). Delay-coupled modeling of spontaneous rate differences in turn-taking synchronization in social contexts. Paper to be presented at the 18th Rhythm Production and Perception Workshop (RPPW), Oslo, Norway.
- \*Melton, Z.J., Chaffin, R., Kangas-Dick, K., Marsh K.L., & **Demos, A.P.** (2021). Does interpersonal liking lead to dyadic synchrony? Paper to be presented at the 18th Rhythm Production and Perception Workshop (RPPW), Oslo, Norway.
- Santiago, D., Lisboa, T., Lee, S., **Demos, A.P.**, & Vasconcelos, M. (2021). Developing and testing a questionnaire of musical memorization and practice. Poster submitted to 16th International Conference on Music Perception and Cognition jointly organized with the 11th triennial conference of ESCOM, Sheffield, UK.
- Palmer, C & **Demos, A.P.** (2021). Explaining entrainment and synchrony with predictive coding and dynamical systems. Paper to be presented at the 18th Rhythm Production and Perception Workshop (RPPW), Oslo, Norway.
- Bégel, V., **Demos, A.P.**, #SorgerBrock, S., & Palmer, C. (2020). Do we make good partners? Individuals adapt their rates more to a faster partner than a slower partner in turn-taking contexts. Poster submitted to the Annual Meeting of the Psychonomic Society, Austin, TX.
- Cox, C., Paltell, K., **Demos, A.P.**, & Berenz, E. (2020). Sex differences in trauma and alcohol cue reactivity. Poster presented at the 2020 Research Society on Alcoholism, New Orleans, LA.
- Berenz, E. C., Paltell, K. C., Bing-Canar, H., Edalatian Zakeri, S., & **Demos, A.P.** (2020). Identifying potential PTSD-AUD treatment targets using a trauma and alcohol cue reactivity paradigm. In E. C. Berenz (chair), Leveraging human laboratory data to inform novel intervention targets in comorbid posttraumatic stress disorder and alcohol use disorder. Symposium accepted for presentation at the 43<sup>rd</sup> annual meeting of the Research Society on Alcoholism, New Orleans, LA.
- Bégel, V., **Demos, A.P.**, Brock, S.S., Palmer, C. (2020<sup>^</sup>). Familiarity with Remembering your Partner's Synchrony: Help or Hindrance? Paper to be presented NeuroMusic Conference VII, Aarhus, Denmark. *Rescheduled to June 2021 do COVID-19*
- #Carter, S.E, #Reiner, I.C, \*Borowski, T.G., \*Carsel, T.S, & **Demos, A.P.** (2020<sup>^</sup>). Jazz hands: Delayed and synchronous dance instruction on indicators of prosocial interaction. Poster accepted to Midwestern Psychological Association Annual Conference, Chicago, IL. *^Cancelled to due COVID-19.*
- \*Melton, Z.J., & **Demos, A.P.** (2020). Synchrony as social information: How synchrony in musical context binds and moves us to cooperate. Poster present at the Society for Personality and Social Psychology Annual Conference, New Orleans, LA.
- \*Vesel, C., \*Rashidisabet H., **Demos, A.P.**, Zulueta, J., Stange, J., Duffecy, J., Hussain, F., Piscitello, A., \*Bark, J., Langenecker, S., Young, S., Mounts, E., Omberg, L., Nelson, P., Moore, R.C., Ajilore, O., & Leow, A. (2019). Diurnal patterns as evidenced by over eleven million smartphone keystrokes during daily usage: An iOS BiAffect Study. Poster presented at the 2019 American College of Neuropsychopharmacology (ACNP), Orlando, FL.
- \*Bing-Canar, H., **Demos, A.P.**, \*Paltell, K., Job, G., Coffey, S., & Berenz, E. (2019). Evaluating the influences of major depression and posttraumatic stress disorder on trauma and alcohol cue reactivity. Poster presented at the 2019 Anxiety and Depression Conference, Chicago, IL.

- \*Edalatian Zakeri, S., **Demos, A.P.**, \*Paltell, K., \*Bing-Canar, H., & Berenz, E. (2019). The explanatory role of positive and negative affect in laboratory-observed trauma and alcohol cue-elicited craving. Poster presented at the 2019 Anxiety and Depression Conference, Chicago, IL.
- Demos, A.P.**, \*Layeghi, H., Wanderley, M.M., & Palmer, C. (2019). Using a bidirectional delay-coupled dynamical model to understand synchronization in joint music performance. Paper presented at the Society for Music Perception and Cognition (SMPC), New York, NY.
- \*Scheurich, R., **Demos, A.P.**, Zamm, A., Mathias, B., & Palmer, C. (2019). Measuring intra- and inter-brain dynamics during joint rhythmic tasks. Paper presented at the Society for Music Perception and Cognition (SMPC) Conference, New York, NY.
- Demos, A.P.**, \*Layeghi, H., Wanderley, M.M., & Palmer, C. (2019). Synchronizing in duet music performance through a bidirectional delay-coupled dynamical model. Paper presented at the 17th Rhythm Production and Perception Workshop (RPPW), Traverse City, MI.
- \*Troian, J., Kant, V., & **Demos, A.P.** (2019). Entropy signatures of protest violence: A dynamical systems perspective. Poster presented at the Annual Meeting of the International Society of Political Psychology (ISPP), Lisbon, Portugal.
- Berenz, E. C., **Demos, A.P.**, \*Paltell, K. C., \*Bing-Canar, H., \*Edalatian Zakeri, S., & \*Ranney, R. (2019). Modeling trauma and alcohol cue elicited craving in young adult trauma survivors. Poster presented at the 42nd Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.
- \*Bark, J., **Demos, A.P.**, Zulueta, J., Stange, J., Duffecy, J., Hussain, F., Piscitello, A., \*Vesel, C., \*Rashidisabet, H., Langenecker, S., Young, S., Mounts, E., Omberg, L., Nelson, P., Moore, R.C., Ajilore, O., & Leow, A. (2019). Complexity of keyboard dynamics in bipolar disorder: A BiAffect digital phenotyping study. Poster presented at the 2019 Society of Biological Psychiatry (SOBP). Chicago, IL.
- \*Troian, J., & **Demos, A.P.** (2019). Entropy signatures of protest violence: A dynamical systems perspective. Poster presented at the International Convention of Psychological Science, Paris, France.
- \*Mueller, A.B., **Demos, A.P.**, Motyl, M., Skitka, L.J., \*Carsel, T.S., & \*Hanson, B.E. (2019). Revisiting the relative replicability of social/personality and cognitive Psychology. Paper presented at the Annual Meeting of the Society for Personality and Social Psychology, Portland, OR.
- Ajilore, O., \*Bark, J., **Demos, A.P.**, Zulueta, J., Stange, J., Duffecy, J., Hussain, F., Langenecker, S., Nelson, P., Ryan, K., McInnis M., & Leow, A. (2018). Assessment of cognitive function in bipolar disorder with passive smartphone keystroke metadata: A BiAffect Digital Phenotyping Study. Poster presented at the Annual Meeting of American College of Neuropsychopharmacology (ACNP), Hollywood, FL.
- Demos, A.P.**, & Kant, V. (2018). Musical encounters: Reconceptualizing musical communication as an ecological construct. Paper presented at the Annual Meeting of International Society for Ecological Psychology, Normal, IL.
- \*Zamm, A., Palmer, C., \*Bauer, A.K., Bleichner, M.G., **Demos, A.P.**, & Debener, S. (2018). Behavioral and neural measures of temporal coordination between performing musicians. Paper presented at the Annual Meeting of Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS), St. John's, CA.
- \*Mueller, A.B., & **Demos, A.P.** (2018). Revisiting the relative replicability of social/personality and cognitive psychology. Paper presented at the Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- \*Prims, J. P., **Demos, A.P.**, & \*Mueller, A. B. (2018). Institutional prestige: A help or hindrance to large samples? Paper presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.
- Hanson\*, B.E., **Demos, A.P.**, & Skitka, L.J. (2018). The "culture wars" in everyday movement: Investigating moral conflict using joint recurrence analysis on body movement. Poster presented at the Annual Meeting of the Society for Personality and Social Psychology, Atlanta, GA.
- Lisboa, T., **Demos, A.P.**, Logan, T.C., & Chaffin, R. (2017). A longitudinal study of the development of expressive timing. Poster presented at the International Symposium on Performance Science (ISPS), Reykjavík, Iceland.

- \*Zamm, A., Palmer, C., \*Bauer, A.K., Bleichner, M.G., **Demos, A.P.**, & Debener, S. (2017). Behavioural and neural factors that facilitate interpersonal synchrony during joint music performance. Poster presented at the Mariani Foundation Music Neuroscience Conference, Boston, MA.
- \*Zamm, A., Palmer, C., \*Bauer, A.K., Bleichner, M.G., **Demos, A.P.**, & Debener, S. (2017). Neural correlates of interpersonal synchrony during duet piano performance. Poster presented at the Neuromusic Conference, Boston, MA.
- Demos, A.P.**, \*Layeghi, H., & Palmer, C. (2016). A mutual adaptation model of joint action in music performance. 14th Auditory, Perception, Cognition, and Action Meeting (APCAM), Boston, MA.
- Kant, V., & **Demos, A.P.** (2016). The engineered dimension of sociotechnical systems. Poster presented at the 6th STS Italia Conference Sociotechnical Environments, Trento, Italy.
- \*Zamm, A., Palmer, C., Bauer, A.K., Bleichner, M.G., **Demos, A.P.**, & Debener, S. (2016). Behavioral and electrophysiological bases of interpersonal synchrony during joint music performance. Poster presented at the Annual Meeting of the Psychonomic Society, Boston, MA.
- Demos, A.P.**, Chaffin, R., & Logan, T. (2016). Bobbing, Weaving, and Gyration: Musician's Sway Reflects Musical Structure. Poster presented at the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco, CA.
- Chaffin, R., & **Demos, A.P.** (2016). Effects of performance cues on expressive timing. Poster presented at the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco, CA.
- Lisboa, T., **Demos, A.P.**, Begosh, K., & Chaffin, R. (2016). How Music Moves Us: Entraining to Musicians' Movements. Poster presented at the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco, CA.
- Ginsborg, J., Chaffin, R., **Demos, A.P.**, & Dixon, J. (2016). Musical structure as a hierarchical retrieval organization: Serial position effects in memory for performed music. Poster presented at the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco, CA.
- Schultz, B.G., **Demos, A.P.**, & Schutz, M. (2016). The wave transformation: A method for analyzing spontaneous coordination from discretely generated data. Poster presented at the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco, CA.
- \*Zamm, A., Palmer, C., \*Bauer, A.K., Bleichner, M. G., **Demos, A.P.**, & Stefan, D. (2016). Neural correlates of endogenous rhythms in performing musicians. Poster presented at the 23rd Cognitive Neuroscience Society (CNS), New York, NY.
- Demos, A.P.**, Del Tufo, S., Marsh, K.L., & Theodore, R., & Chaffin, R. (2015). Intentional and spontaneous interpersonal synchronization in Dyslexia. Poster presented at the 13th Auditory, Perception, Cognition, and Action Meeting (APCAM), Chicago, IL.
- Demos, A.P.**, Wanderley, M.M., & Palmer, C. (2015). Auditory Feedback Perturbations Disrupt Synchrony in Ensemble Music Performance. Poster presented at the Psychonomic Society Annual Meeting, Chicago, IL.
- Zamm, A., Palmer, C., Bauer, A.K., Bleichner, M. G., **Demos A.P.**, & Debener, S. (2015). Neural correlates of endogenous rhythms during music performance. Poster presented at the 10<sup>th</sup> Anniversary Symposium of the International Laboratory for Brain, Music, and Sound Research, Montreal, Canada.
- Lisboa, L., **Demos, A.P.**, & Chaffin, R. (2015). Spontaneity in performance: Effects of thinking on expressive variation in tempo. Poster presented at the International Symposium on Performance Science, Kyoto, Japan.
- Demos, A.P.**, Spidle, F., Koopmans, E. & Palmer, C. (2015). Postural coordination between duet vocalists. Poster presented at the Annual Conference of the Society of Music Perception and Cognition, Nashville, TN.
- Demos, A.P.**, Wanderley, M.M., & Palmer, C. (2015). Comparisons of action simulation and motor synergies in duet performance. Poster presented at the Annual Conference of the Society of Music Perception and Cognition, Nashville, TN.

- Demos, A.P.**, Wanderley, M.M., & Palmer, C. (2015). Auditory Feedback Perturbations Disrupt Solo and Joint Piano Performance. Poster presented at the New England Sequencing and Timing (NEST) Conference, Amherst, MA.
- Marsh, K.L, **Demos, A.P.**, & Chaffin, R. (2015). Coordination of movement through music. Poster presented at the 6th Joint Action Meeting, Duna Palota, Budapest.
- Demos, A.P.**, Palmer, C., Wanderley, M.M., & Dixon, R. (2014). Auditory Feedback Perturbations Affect Duet Music Performance. Poster presented at the 24th Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS), Toronto, CA.
- Demos, A.P.**, Spidle, F., Koopmans, E., & Palmer, C. (2015). Singers' postural sway during solo and duet performance. Poster presented at the Workshop on Sensorimotor Integration, CIRMMT, McGill, Montreal.
- Demos, A.P.** (2014). Postural sway and musical structure: A dynamical systems approach to expressive trombone performance. Poster presented at the Workshop on Dance, Movement, Cognition, and the Brain, BRAMS/CRBLM, University of Montreal, Montreal.
- Demos, A.P.**, Del Tufo, S., Chaffin, C., Marsh, K.L., & Theodore, R. (2014). Spontaneous Interpersonal Synchronization in Dyslexia. Poster presented at the 21st Cognitive Neuroscience Society (CNS), Boston, MA.
- #Alfred, K, **Demos, A.P.**, Chaffin, C., & Marsh, K.L. (2014). Individual differences in intentional rhythmic synchrony. Poster presented at the Eastern Psychological Association (EPA), Boston, MA.
- Demos, A.P.**, & Chaffin, R. (2013). The Perception of Trombonist Movement through Musical Sound. Poster presented at the 12th Auditory, Perception, Cognition, and Action Meeting (APCAM), Toronto, CA.
- Chaffin, C., Gerling, C., **Demos, A.P.**, & #Melms, A. (2013). Theory and practice: A case study of how Schenkerian analysis shaped the learning of Chopin's Barcarolle. In by A. Williamon, D. Edwards, & W. Goebel (Eds.), Proceedings of the International Symposium on Performance Science. Brussels, Belgium. European Association of Conservatoires.
- Ginsborg, J., Chaffin, C., **Demos, A.P.**, & Nicholson, G. (2013). Reconstructing Schoenberg: Rehearsing and performing together. In by A. Williamon, D. Edwards, & W. Goebel (Eds.), Proceedings of the International Symposium on Performance Science. Brussels, Belgium. European Association of Conservatoires.
- Lisboa, T., Chaffin, C., **Demos, A.P.**, & Gerling, C. (2013). Flexibility in the use of shared and individual performance cues in duo performance. In by A. Williamon, D. Edwards, & W. Goebel (Eds.), Proceedings of the International Symposium on Performance Science. Brussels, Belgium. European Association of Conservatoires.
- Lisboa, T., Chaffin, C., & **Demos, A.P.** (2013). Recording thoughts as an aid to memorization: A case study. In by A. Williamon, D. Edwards, & W. Goebel (Eds.), Proceedings of the International Symposium on Performance Science. Brussels, Belgium. European Association of Conservatoires.
- Chaffin, R., **Demos, A.P.**, Alfred, K., & Marsh, K.L. (2013). Predicting auditory interpersonal synchrony through synchrony to music. Poster presented at the 12th Auditory, Perception, Cognition, and Action Meeting (APCAM), Toronto, CA.
- Ginsborg, J., Chaffin, R., **Demos, A. P.**, & Nicholson, G. (2013). Different roles for prepared and spontaneous thoughts: A practice-based study of performance from memory. Poster presented at the 2nd Performance Studies Network Conference (CMPCP), Cambridge, UK.
- Ginsborg, J., Chaffin, R., **Demos, A. P.**, & Nicholson, G. (2013). Practice-based research in and on practice: The development of performance cues. CARPA 3: The Impact of Practice as Research. Theatre Academy, Helsinki, Finland.
- Lisboa, T., Chaffin, R., **Demos, A.P.**, & Aufegger, L. (2012). Preparing memorised performance: The transition between childhood and expertise. In by J. Weller, Proceedings of the 19th International Seminar of the Commission for the Education of the Professional Musician (CEPROM), Athens, Greece.
- Demos, A.P.**, Chaffin, R., & Marsh, K.L. (2012). Self-organization of spontaneous synchronization while "Maraca-ing". Poster presented at the Psychonomic Society Annual Meeting, Minneapolis, MN.

- Chaffin, R., **Demos, A.P.**, Kant, V., & Lisboa, T. (2012). "It's Different Every Time": Stability of expressive timing in repeated music performance. Poster presented at the Psychonomic Society Annual Meeting, Minneapolis, MN.
- Shaw, A., **Demos, A.P.**, Arthur, D., & Magnuson, J.S. (2012). Individual differences in lexical quality of newly learned words. Poster presented at the Psychonomic Society Annual Meeting, Minneapolis, MN.
- Marsh, K.L., **Demos, A.P.**, & Chaffin, R. (2012). Moving to the beat: Spontaneous and intentional coordination while Maraca-ing. Poster presented at the European Workshop on Ecological Psychology (EWEP), Madrid, Spain.
- Demos, A.P.**, Frank, T., & Chaffin, R. (2011). Understanding movement during performance: A recurrence quantization approach. In by A. Williamon, D. Edwards, & L. Bartel (Eds.), Proceedings of the International Symposium on Performance Science 2011. Utrecht, The Netherlands. European Association of Conservatoires.
- Ginsborg, J., Chaffin, R., & **Demos, A.P.** (2011). Preparation and spontaneity in performance: Effects on subsequent recall. Poster presented at the Conference on Interdisciplinary Musicology (CIM11), Glasgow, Scotland.
- Demos, A.P.**, Frank, T., & Logan, T. (2011). Movement during performance: A hunt for musical structure in postural sway. Poster presented at the Society for Music Perception and Cognition (SMPC), Rochester, NY.
- Lisboa, T., **Demos, A.P.**, Chaffin, R., & Begosh, K.T. (2011). The development of interpretation during practice and public performance: A case study. Paper presented at the Society for Music Perception and Cognition (SMPC), Rochester, NY.
- Demos, A.P.**, Chaffin, R. & Marsh, K.L. (2010). Spontaneous vs intentional entrainment to a musical beat. In Proceedings of the 11th International Society for Music Perception and Cognition. Adelaide, Australia: Casual Productions.
- Demos, A.P.**, Chaffin, R. & Marsh, K.L. (2010). Differences between spontaneous and intentional entrainment to a musical beat. Poster presented at the Association for Psychological Science, Boston MA.
- Chaffin, R., **Demos, A.P.**, & Crawford, M. (2009). The PC-survey: How does the use of performance cues vary across musicians, instruments, musical styles, and performances? In Proceedings of the International Symposium on Performance Science 2009 (pp. 57-62). Utrecht, The Netherlands: European Association of Conservatoires.
- Chaffin, R., **Demos, A.P.**, & Crawford, M. (2009). Sources of variation in musicians' use of performance cues. In Proceedings of the 2nd International Conference on Music Communication Science (pp. 109 - 112). University of Western Sydney: HCSNet.
- Demos, A.P.**, Chaffin, R., Lewis, A., Begosh, K.T., & Daniels, J. (2009). Rocking in synch: Effects of music on interpersonal coordination. Poster presented at the Society for Music Perception and Cognition (SMPC), Indianapolis.
- Demos, A.P.**, & Chaffin, R. (2009). A Software Tool for Studying Music Practice: SYMP (Study Your Music Practice). Poster presented at the European Society for the Cognition Sciences of Music (ESCOM), University of Jyväskylä, Finland.
- Demos, A.P.**, Aaronson, D., & Aiello, R. (2008). Musicians' cognitive processing strategies. Paper presented at the 2nd International Conference on Psychology, Athens, Greece.
- Aaronson, D., **Demos, A.P.**, & Aiello, R. (2007) Cognitive processing strategies for music and language: Some individual differences. Poster presented at the Eastern Psychological Association.
- Aiello, R., Aaronson, D., & **Demos, A.P.** (2006). Individual differences in music perception. In: M. Baroni, A. R. Addressi, R. Caterina, M. Costa (Eds.), Proceedings of the 9th International Conference on Music Perception & Cognition (pp.1226-1232), Bologna, Italy.
- Demos, A.P.** (2005). Transitioning from paper- to web-based surveys. Poster presented at the NYU Graduate School of Arts and Sciences Research Conference, New York, NY.

- Aiello, R., Aaronson, D., & **Demos, A.P.** (2004). Musicians' perceptions of musical boundaries. In S.D. Lipscomb, R. Ashley, R.O. Gjerdingen, & Webser (Eds.), *Proceedings of the 8th International Society for Music Perception and Cognition* (pp.681-685). Adelaide, Australia: Casual Productions.
- Aiello, R., Aaronson, D., & **Demos, A.P.** (2003). What is salient when you listen? An evaluation of musicians' responses. In *Proceedings of Society for Music Perception & Cognition*. Nevada.