

# Kristina L. Knowles

[Kristina.Knowles@asu.edu](mailto:Kristina.Knowles@asu.edu)  
[Knowles.Kristina@gmail.com](mailto:Knowles.Kristina@gmail.com)

---

## Education

### Northwestern University, Chicago IL

Ph.D., Music Theory and Cognition 2016

Dissertation: "The Boundaries of Meter and the Subjective Experience of Time in Post-Tonal, Unmetered Music"

Advisor: Dr. Mark J. Butler

Cognitive Science Certificate 2015

### Nazareth College, Rochester NY

2011

B.M. Music Theory

Areas of Concentration: Music Theory and Composition, Voice, Piano

*Summa Cum Laude*, Dean's List

## Publications

### Book

Knowles, Kristina. *Experiencing Musical Time*. Under contract with OUP.

### Book Chapters

Knowles, Kristina. 2020. "No Doubt They Are Dream-Images': Meter and Memory in George Crumb's 'Dream-Images.'" In *Proceedings of the 15th Annual Congress of the Gesellschaft Der Musiktheorie at the Hochschule Für Musik Hanns Eisler and the Universität Der Künste Berlin*, edited by Marcus Aydintan, Florian Edler, Roger Graybill, and Laura Kramer, 238–48. Hildesheim; Zurich; New York: Verlag Olms.

Knowles, Kristina. (2021). "Music as Time, Music as Timeless." In *Oxford Handbook of Time in Music*, edited by Mark Doffman, Toby Young, and Emily Payne. New York: Oxford University Press.

Knowles, Kristina and Nicholas Shea. (2023). "From Counterpoint to Small Forms: A Cross-Style Approach to Incorporating BIPOC Composers in the Theory Core," In *Black Composers in the Music Theory Classroom*, edited by Melissa Hoag. New York, London: Routledge.

Knowles, Kristina and Richard Ashley. (2023). "Measuring Experienced Time While Listening to Music." In *Performing Time: Synchrony and Temporal Flow in Music and Dance*, edited by Clemens Wöllner and Justin London. New York: Oxford University Press.

## Journal Articles

- Knowles, Kristina. (2020). "Beyond Post-Tonal: A Broader Approach to the Fourth Semester Course," *Engaging Students: Essays in Music Pedagogy* Vol. 7.
- Knowles, Kristina. (2017). "A Broken Idyll: Post-Pastoralism in the Works of George Crumb." *E-Rea, Pastoral Sounds*, 14.2: 1–15.
- Knowles, Kristina. (2022). "Between the Beats: Metric Ambiguity and Rhythmic Gesture in the Works of George Crumb," *Contemporary Music Review* Vol. 39.
- Knowles, Kristina, K. Jacob Patten, Cecilia Durojaye, Babatunji O. Dada, Michael McBeath. (In submission). "Yorùbá Speech Surrogacy with the Dùndún Talking Drum: Recognition Accuracy is a Function of Language Familiarity and Musical Training. *Music Perception*.
- Durojaye, Cecilia, Kristina L. Knowles, K. Jakob Patten, Mordecai J. Garcia, Michael K. McBeath. (2021). "When Music Speaks: An Acoustic Study of the Speech Surrogacy of the Nigerian Dùndún Talking Drum." *Frontiers in Communication* 6. <https://www.frontiersin.org/articles/10.3389/fcomm.2021.652690>.

## Teaching Positions and Related Professional Positions

- 2023-present **Adjunct Professor**, ASU Department of Psychology
- Spring 2023 **Adjunct Professor**, ASU School of Music, Dance and Theatre
- 2017–2022 **Assistant Professor of Music Theory**, ASU School of Music
- 2016–2017 **Instructor of Music Theory**, ASU School of Music
- 2016–2022 **Honors Faculty**, Barrett Honors College, ASU
- 2015-2016 **Graduate Teaching Certificate Program**, NU Searle Center for Advanced Teaching and Learning
- 2013–2015 **Instructor of Record**, NU Bienen School of Music
- 2008-2016 **Private Music Theory Instructor**, Rochester, New York and Chicago, Illinois

## Grants

- Yeom, Dongwoo Jason and Kristina Knowles. (2021). Music and indoor environment: Using human physiological signals to identify the optimum indoor lighting environment for music listening. Submitted to Herberger Institute Research Building Investment. \$15,000. (funded).
- Knowles, Kristina, K.J. Patten, and Michael McBeath. (2021). WEIRD and non-WEIRD Music, Speech, and Emotion. Submitted to the Justice, Equity, Diversity and Inclusion Seed Grant. \$10,000. (not funded).
- Knowles, Kristina and Nicholas Shea. (2021). *Temporal processing of musical structures*. Submitted to Herberger Institute Research Building Investment. \$14,910.

McClure, Samuel and Leslie Baxter. (2020). *Presurgical mapping for cognitive expertise using fMRI*. Submitted to ASU-Mayo Seed Grant. Co-investigator. \$50,000.  
NEA Sound Health Network ASU internal submission (2019). Secured ASU limited submission slot.

### **Invited Talks**

- “Examining Speech and Song Surrogacy in the Yorùbá Dùndún Talking Drum,” University of California Davis Musicology and Ethnomusicology Forum, June 1st 2023.
- “Beyond the Metronome: Understanding the Nuances of Time Perception in Music,” Arizona State University, SAMBA Interdisciplinary Research Group, March 21st, 2023.
- “What the Drums Say: Perceiving Speech and Song Surrogacy with the Dùndún Talking Drum,” Hackers Conference, Santa Cruz, November 5th 2022.
- “The Role of Language Familiarity and Musical Training in Recognition Accuracy for Yorùbá Speech Surrogacy with the Dùndún Talking Drum,” Arizona State University, SAMBA Interdisciplinary Research Group, August 30th 2022.
- “Theories, Concepts, and Approaches to Time in Music,” Elon University, Music Department, March 23rd 2021.
- “An Acoustic Study of Speech and Song Surrogacy in the Nigerian Dùndún Talking Drum,” Arizona State University, SAMBA Interdisciplinary Research Group, February 2nd 2021.
- “Meter and its Temporalities,” University of Oregon, Steve Larson Brown Distinguished Lecture Series, December 6th, 2019.
- “Exploring the Temporal Experience of Musical Listening: Pros and Cons of a Continuous Response Methodology,” Arizona State University, SAMBA Interdisciplinary Research Group, September 11th, 2018.
- “Time in Music,” Participant in round-table discussion, ASU Prisms Contemporary Music Festival, November 11th, 2017.
- “Music as Time, Music as Timeless,” Arizona State University Musicology Colloquium, September 30th, 2016.
- “Oh the Places You’ll Go: Possibilities in Music Theory and Cognition and an Introduction to Research,” Nazareth College, Department of Music, April 5th, 2016.
- “Writing your Music Prospectus,” Northwestern University Music Studies Colloquium, February 19th, 2015.

### **Conference Presentations**

- “A Cross-Cultural Study on the Perceptual Similarity of Dùndún Drumming and Yorùbá Speech and Song between Yorùbá Speakers and English Speakers,” Society for Music Perception and Cognition, Portland, August 4th-7th, 2022.
- “Temporal Duality: Cyclical and Linear Features of Meter,” European Music and Analysis Conference, Moscow, Russia, September 2021 (Originally 2020 but postponed due to COVID-19).
- “Speech and Song Surrogacy in the Yorùbá Dùndún Talking Drum,” International conference for the Society of Music Perception and Cognition, Online, July 28th-21st, 2021.

- “Comparison of Subjective Time Estimation and Continuous Response Methodologies for Studying the Effects of Music on Experienced Time,” *Future Directions of Music Cognition*, May 2020. Postponed due to COVID-19.
- “Comparison of STE and Continuous Response Methodologies for Studying the Effects of Music on Experienced Time,” *International Symposium on Time Changes in Experiences of Music and Dance*, Hamburg, November 29th-30th, 2019.
- “Theorizing Silence,” *Annual Meeting of the Society for Music Theory*, San Antonio, November 1st-4th, 2018.
- “Theorizing Silence,” *Annual Meeting of the West Coast Conference for Music Theory and Analysis*, San Diego State University, San Diego, April 6th-8th, 2018.
- “Theorizing Silence,” *Annual Meeting of the Rocky Mountain Society for Music Theory*, University of Arizona, Tucson, March 23rd-24th, 2018.
- “When Time Stops: Theorizing Timelessness in Music,” *Society for Literature, Arts and Science*, ASU, Tempe, November 9th-12th, 2017.
- “Time vs Tension: The Influence of Contemporary Music on Experienced Time,” *Society for Music Perception and Cognition*, University of San Diego, San Diego, July 30th-August 3rd, 2017.
- “Music as Time, Music as Timeless,” *Annual Meeting of the West Coast Conference of Music Theory and Analysis*, University of Victoria, Victoria, April 21st-23rd, 2017.
- “Music as Time, Music as Timeless,” *Annual Meeting of the Rocky Mountain Society of Music Theory*, University of Utah, Salt Lake City, April 7th-8th, 2017.
- “Music as Time, Music as Timeless,” *Making Time in Music: An International Conference*, University of Oxford, September 12-14th, 2016.
- “Meter and Memory: A Bergsonian Interpretation of George Crumb’s ‘Dream Images,’” *Annual Meeting of the West Coast Conference of Music Theory and Analysis*, University of California Santa Barbara, April 1st-3rd, 2016.
- “The Perception of Time in Contemporary Music: Methodological Conundrums,” *Annual Meeting of the Society for Music Theory*, Music Cognition Interest Group, St. Louis, October 29th-November 1st, 2015.
- “Meter and Memory: A Bergsonian Interpretation of George Crumb’s ‘Dream Images,’” *German Music Theory Society*, “Time in Music,” Berlin, October 1st-4th, 2015.
- “The Influence of Contemporary Music on Experienced Time,” *Annual Meeting of the Society for Music Perception and Cognition*, Nashville, August 1st-5th, 2015.
- “Ebb and Flow: Rhythm and Temporality in Unmetered Music by George Crumb (and Morton Feldman),” *Annual Meeting of the West Coast Conference of Music Theory and Analysis*, California State University, Fullerton, February 27th-March 1st, 2015.
- “Temporal Inflections in the Pastoral from Chopin to Crumb,” *International Conference on Pastoral Sounds*, Poitiers, France, November 12th-14th, 2014 (funded speaker).
- “Ebb and Flow: Rhythm and Temporality in Unmetered Music by George Crumb,” *European Music and Analysis Conference*, Leuven, Belgium, September 17th-22nd, 2014.
- “Temporal Inflections in the Pastoral from Chopin to Crumb,” *Annual Meeting of the Rocky Mountain Society of Music Theory*, ASU, Tempe, April 4th-5th, 2014.
- “Ebb and Flow: Rhythm and Temporality in Unmetered Music by George Crumb,” *Annual Meeting of the Music Theory Society of the Mid-Atlantic*, Shenandoah University, March 21st-22nd, 2014.

“Ebb and Flow: Rhythm and Temporality in Unmetered Music by George Crumb,” Midwest Graduate Music Consortium, University of Chicago, April 12th-13th, 2013.

“Ebb and Flow: Rhythm and Temporality in Unmetered Music by George Crumb,” Harvard Graduate Music Forum: Music at the Margins, February 23rd-24th, 2013.

## Research Collaborations

**Northwestern University**, Richard Ashley 2016-Present  
Working on empirical study pertaining to time perception. Exploratory research published in forthcoming edited volume (*Performing Time*, OUP). Research article comparing novel and standard methodologies for time perception submitted to *Music Perception*, received a revise and resubmit. Currently waiting on completion of follow-up studies being conducted at Northwestern University.

**Arizona State University**, Mike McBeath, Sam McClure, Josh Gardner 2018-Present  
Running interdisciplinary group that meets once a week to discuss research on science and the arts. Past group projects include ASU-Mayo clinic grant to study expertise effects on tonotopic maps within auditory cortex.

**Arizona State University, Max Planck Institute**, Cecilia Durojaye, K. Jacob Patten, Mike McBeath 2020-Present  
Researching and analyzing the dũndũn (Nigerian talking drum) and its use as a speech surrogate. Research produced thus far has been published in *Frontiers in Communication* and presented at multiple regional and international conferences, with another publication in submission.

## Teaching

### Courses Taught at ASU

MTC 222: 19th c. Theory

MTC 223: 20th c. Theory

MTC 496: Theory Project

MTC 492: Honors Directed Study

MTC 493: Honors Thesis

MTC 591 (now MTC 535): Studies in Rhythm and Meter

MTC 525: Music Theory Pedagogy

MTC 591: Musical Topics in the Classical Period

MTC 598: Music and Emotion

MTC 591: Music and Time

MTC 598: Music and the Mind

MTC 591: Groove, Swing, and Microtiming

MTC 500/PSY 598: SAMBA (Science of Art, Music, and Brain Activity)

MTC 584: Pedagogy Internship

MTC 496: Music Theory Project

MTC 499: Individualized Instruction

### **Courses Taught at Northwestern**

MUS 211-3: Music Theory VI  
MUS 211-2: Music Theory V  
MUS 211-1: Music Theory IV  
MUS 125-3: Aural Skills III  
MUS 125-2: Aural Skills II  
MUS 125-1: Aural Skills I

### **D. M. A. Committee Service—Dissertation Committee Member (ASU–SOM)**

Paul Koch, “An Examination of the Educational and Pedagogical Correlations Between the Arizona State Standards for Musical Proficiency and an Automated List of Select Wind Band Repertoires,” DMA in Conducting, 2019.

Brianne Borden, “Yoga for Musicians: A Practical Guide to Using Common Yoga Techniques for Performing Musicians,” DMA in Trumpet Performance, 2020.

Michael DiBarry, “Microtonal Violin Pedagogy: Mastering the Neutral Second through Persian Dastgāhhā,” DMA in Violin Performance, 2020.

Melanie Holms, “The Voice Somatics Integration Lab: Developing Kinesthetic Connections Through Voice and Movement,” DMA in Vocal Performance, 2020.

Malcolm Jones, “A Recording and Performance Guide for Six New Works for Concert Band Composed by Composers from Underrepresented Communities,” DMA in Conducting, 2020.

Julia Lougheed, “The Persistence of Art Music: Creating Contemporary Clarinet Works Under COVID-19 Restrictions,” DMA in Clarinet Performance, 2021.

William Clay, “Temporal Creative Entanglement and the Composer’s Search for a Unique Voice,” DMA in Composition, 2021.

Ashlee Busch, “Collaboration as the Initial Stage of Artistic Group-Work: The Collaborative Stage of Co-Creation between Music Composers and other Artists.” DMA in Composition, 2021.

Elizabeth Druerdrow, “Survey of Clarinet Mouthpiece and Reed Preferences: Current Trends.” DMA in Clarinet Performance, 2021.

Kirsten Blair, “The Individual Singing Voice in the Studio and Classroom: An Inclusive eBook Design for Beginning Singers and Their Teachers,” DMA in Voice Performance, 2022.

Amanda Osman, “Lost Voices: A Survey of Knowledge of Temporal Mandibular Joint Disorder and Muscle Tension Dysphonia in the Professional Voice Studio,” DMA in Voice Performance, 2023.

### **M. A. Committee Service—Masters Committee Member (ASU-SOM)**

#### Co-Chair

Alexander Rossi, “Music Movement Synchronization in Capoeira,” M.A. Ethnomusicology, 2020.

### **M. M. Committee Service—Masters Committee Member (ASU-SOM)**

Sonja Prychitko, MM Violin Performance, 2022.

Kristen Zelenak, MM Wind Band Conducting, 2022.

Angelita Ponce, MM in Percussion Performance, 2022.

Karl Stefans, MM in Composition, 2020.

Sean Albarran, MM in Jazz Performance, 2020.

Kadin de la Barra, MM in Horn Performance, 2020.

Kate Vincent, MM in Composition, 2019.

Julia Lougheed, MM in Clarinet Performance, 2018.

Francisco Javier de Alba, MM in Clarinet Performance, 2018.

JP Lempke, MM in Composition, 2018.

Reynold Torres, MM in Guitar Performance, 2018.

Diego Miranda, MM in Guitar Performance, 2018.

### **Undergraduate Theory Final Projects**

Alejandro Cueto, “Finding Meaning in Topics and Styles Presented in Dvorak’s Serenade for Winds.” Spring 2019.

Jillian Lunt, “Whistling Horses: An Analysis of Topics and Narrative in Julia Wolfe’s *Trilogy of the U.S. American Worker*.” Fall 2019

Jacob Anderson, “The Spectre in Music: Timbre, Intertextuality, and American Culture.” Spring 2020.

Vashawn Aurora, “The Groove of Vulfpeck: Understanding the Components of Minimalist Funk.” Fall 2020.

Sophia Wetzel, “The Importance of Genre in *Next to Normal*.” Spring 2021.

Mason Cox, “(Not Really) Moving: A Look at Narrative and Temporal Stasis in Video Game Music.” Spring 2022.

### **Honors Thesis Committee Service**

Co-Chair, Vashawn Aurora, “This is Jam Music: A Full Album and Musical Process, Spring 2021.

Chair, Courtney Ferry, "Fibonacci Hidden in Musical Places," Fall 2019.  
 Member, Timothy McGeehon, "Advancing Artificial Intelligence's Ability to Creatively Express Through Music by Teaching it Emotional Awareness," Spring 2018.  
 Member, Parker Kaufmann, "Trends in Musical Tastes and Preferences According to Individuals' Level of Musical Education and Other Historical Factors," Spring 2018.

### **Honors and Awards**

Steve Larson Brown Distinguished Speaker Series, Invited Speaker	2019
ASU School of Music Travel Awards	2016-2018
Cognitive Science Travel Grant	2015
Bienen School of Music Travel Awards	2013-2016
Northwestern University TGS Travel Awards	2014-2015
The Northwestern Graduate Research Grant	2013-2014
Vice President's Award for Achievement in Scholarship and Leadership (Nazareth College)	2011
Presser Scholar	2010

### **Professional Service**

Reviewer for <i>Popular Music</i> , <i>Music Perception</i>	2020-2021
Editorial Board for <i>Indiana Theory Review</i>	2020
Editorial Board for SMT-V	2020
Emergency Advisory Committee for Rocky Mountain Society of Music Theory	2020
Conference Program Committee Member for Rocky Mountain Society of Music Theory	2019
Session chair for 1st Annual SciAPP Workshop, ASU	March, 2019
Mentor within the Society of Music Theory's Committee on the Status of Women Mentor/mentee program for conference abstracts	2019
Session Chair for Annual Meeting of Rocky Mountain Society, "Is it Film	2018



or is it Impressionism”

Reviewer for *Gamut* 2016

Program Committee Member of the 19th Annual Midwest Graduate Music Consortium 2015

### **University Service**

Undergraduate Curriculum Development Committee 2018-present

Search Committee, Assistant Professor of Music Theory 2021-2022

Search Committee, Assistant Professor of Music Theory 2019-2020

Search Committee, Instructor of Music Theory Spring 2019

Search Committee, Assistant Professor of Composition, Assistant/Associate Professor of Composition 2018-2019

Search Committee, Assistant Professor of Guitar 2017-2018

Selection Committee for Graduate Music Theory Pedagogy Certificate Program, ASU School of Music 2016-2022

Willard Residential College, Graduate Fellow 2013-2016

Northwestern Music Theory and Cognition Colloquium Organizer Fall 2015, 2012-2013

Abstract review board, Music Studies Departmental Colloquium Winter 2013

### **Professional Memberships**

Society for Music Theory joined 2010

Society for Music Perception and Cognition joined 2010