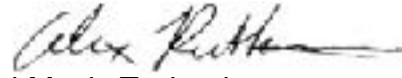


## COMPREHENSIVE PROFESSIONAL VITAE

S. Alex Ruthmann



Associate Professor of Music Education and Music Technology

Appointed: September 2013

Department of Music and Performing Arts Professions

Steinhardt School of Culture, Education, and Human Development

New York University

### EDUCATION AND ACADEMIC QUALIFICATIONS

#### Education

- 2006 DOCTOR OF PHILOSOPHY, Music Education  
Oakland University, Rochester, MI  
Additional Cognate: Educational Leadership
- 2002 MASTER OF MUSIC, Music Education  
Oakland University, Rochester, MI
- 2000 BACHELOR OF MUSIC, Music and Technology  
University of Michigan, Ann Arbor, MI  
Artist and Scholar Honors Program, *cum laude*

#### Academic Experience

- 2013-Present** Associate Professor, Music Education & Music Technology  
Director, NYU Music Experience Design Lab (MusEDLab)  
Department of Music and Performing Arts Professions  
Steinhardt School of Culture, Education and Human  
Development, New York University
- 2013 Associate Professor, Music Education  
2008-2013 Assistant Professor, Music Education  
Department of Music  
University of Massachusetts Lowell
- 2006-2008 Assistant Professor, Music Education  
Department of Music  
Indiana State University, Terre Haute, IN
- 2003-2006 Special Lecturer, Music Education, Technology & Theory  
Department of Music, Theatre and Dance  
Oakland University, Rochester, MI

## Non-University Professional Experience

2003-2006	General Music Teacher Cranbrook Kingswood Middle School - Bloomfield Hills, MI
2002-2007	Owner MusicPartner, LLC - Rochester Hills, MI Manufactured and distributed music education technology products and services for music educators.
Fall 2000	Sales and Marketing Intern Yamaha Corporation of America - Grand Rapids, MI Band and Orchestra & MIE Divisions
Winter 2000	Assistant Audio Engineer Intern Solid Sound Recording Studio - Ann Arbor, MI
2001 1999-2001	Director of Education Research and Development Consultant Innovations Fm7, La Pocatière, Quebec, Canada Organized and presented product seminars, developed curricular integration strategies for music technology products, and developed new electronic musical instruments for the general music classroom.

## PROFESSIONAL ACTIVITIES

### Professional Association Participation

International Society for Music Education	2004-Present
Audio Engineering Society	2014-Present
Association for Technology in Music Instruction	2007-Present
College Music Society	2007-Present
National Association for Music Education	2001-Present
Society for Research in Music Education	2002-Present

### Professional Leadership Positions

<b>Present</b>	Commissioner ( <b>from 2014</b> ), Music in Schools and Teacher Education Commission (MISTEC) - <a href="http://mistec.org">http://mistec.org</a> <i>International Society for Music Education</i>
	Chair ( <b>from 2013</b> ), Committee on Instructional Technologies <i>College Music Society</i>

<b>Present</b>	Member ( <b>from 2013</b> ), Music Education Advisory Council <i>College Music Society</i>
2012-2014	President <i>Association for Technology in Music Instruction</i>
2011-2013	Convener (2011-2013), New Professionals SIG USA Representative (2004-2010) - Young Professionals Focus Group (YPPFG) <i>International Society for Music Education</i>
2010-2012	Member, Advocacy Standing Committee <i>International Society for Music Education</i>
2008-2014	Past-Chair (2012-2014) Chair (2010-2012); Chair-Elect (2008-2010) Creativity Special Research Interest Group (SRIG) <i>Society for Research in Music Education</i>
2006-2008	Technology Chair, Board of Directors <i>Indiana Music Educators Association</i>
2005-2006	Technology Representative, Conference Planning Cmte <i>Michigan Music Conference</i>
2003-2006	Conference Co-Director <i>Michigan Music Technology Conference</i>

## Non-Teaching Activities

### a. Editorships

<b>Present</b>	Associate Editor ( <b>2013-Present</b> ) <i>Journal of Music, Technology &amp; Education</i>
<b>2012-2015</b>	Co-Editor (2013-2015) Managing Editor (2007-2012) <i>International Journal of Education &amp; the Arts</i> <a href="http://www.ijea.org/">http://www.ijea.org/</a>

### b. Editorial/Academic Advisory Board Memberships & Activity

<b>Present</b>	Editorial Board <i>College Music Symposium - Instructional Technologies, Methodologies and Resources</i>
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- Present** Member, International Advisory Board  
*British Journal of Music Education*
- Founding Member, Editorial Board  
*Journal of Music, Technology and Education*
- Founding Member*, Editorial Board  
*Journal of Popular Music Education*
- Founding Member*, Editorial Board  
Media Journal in Music Education
- Member, Advisory Board  
Technology Institute for Music Educators (TI:ME)
- Peer Reviewer  
*Research Studies in Music Education*  
*Bulletin of the Council for Research in Music Education*  
*International Journal of Music Education*  
*Psychology of Music*  
*Journal of Music and Meaning*
- 2008-2012 Member, Editorial Board  
*International Journal of Music Education: Practice*

### c. Keynote & Featured Speaker

- May 2017** *Designing Technologies and Experiences for Music*  
Digital Technology in Arts Education Conference. Bergen  
University College. Bergen, Norway.
- Apr. 2017** *Design-Based Translational Research in Music Experience*  
*Design*  
Translational Research in Creative Practice Symposium.  
University of Queensland. Brisbane, Australia
- Researching and Designing Technologies for Audience*  
*Engagement.*  
Research in Higher Degrees Student Symposium. University of  
Queensland. Brisbane, Australia
- Jan. 2017** Music, Play & Curiosity: Expressing Self  
*Designing Musical Experiences with Technology*  
*Play With Your Music: Digital Tools & Strategies*  
*Interdisciplinary Connections through Creative Music Technology*  
*Projects*  
Illinois Music Educators Association Conference. Peoria, Illinois.

- Nov. 2016** *Design-based Approaches to Creating Musical Technology Experiences with and for Young People and Educators.* Grieg Research School in Interdisciplinary Music Studies. University of Bergen. Bergen, Norway.
- Designing Technologies and Experiences with and for Educators and Youth.* Berklee City Music Research Summit. Newark, NJ.
- Mar. 2016** *The Tide is Turning for Music Education.* Panelist with David Wish and Elaine Williams. SXSWedu. Austin, TX.
- Dec. 2015** *From the University Labs: A Glimpse into the Future of EdTech* Featured panelist, with Jan Plass, Sandra Okita and Susan Fuhrman. National Education Week. New York, NY.
- Nov. 2015** *Creative collaboration through co-design with youth, educators, academics, and community partners at the MusEDLab.* Creative Collaboratorium Symposium, University of Queensland, Brisbane, Australia.
- Oct. 2015** *Designing technologies and experiences for music making, learning and engagement.* Visiting Scholar talk, James Madison University, Harrisonburg, VA.
- July 2015** *Some challenges of open and community in global MOOCs.* Invited Panelist. Asia Pacific Symposium on Music Education Research. Hong Kong Institute of Education. Hong Kong, China.
- June 2015** *Designing for learning and engagement in the NYU Music Experience Design Lab.* The North Alliance. Oslo, Norway
- Building connections between the music industry and academia through design labs.* BergenFest. Bergen, Norway.
- Nov. 2014** *Stepping inside, playing, and being with music: New interfaces for engaging with music.* Cultural and Technological Innovation Symposium Shenzhen University, Shenzhen, Guandong, China
- Collaborating and Creating with New Media* Wayne County (MI) Intermediate School District
- Sep. 2014** *Exchanges of musical cultures through the internet.* International Music Institution Leaders Forum China Conservatory, Beijing, China

- Aug. 2014** *Designing technologies and communities in support of popular music education.*  
Little Kids Rock Modern Band Symposium  
Colorado State University, Ft. Collins, CO.
- May 2014** *Designing contemporary music programs with local communities.*  
Little Kids Rock Modern Band Symposium. Fort Collins, CO
- Apr. 2014** *Learning from videos in a creative music making MOOC.*  
Conference on Video in Music Education. Institut für  
Musikpädagogik. Graz, Austria.
- Jun. 2012 *Practical uses of technology in the processes of music research.*  
Grieg Research School in Interdisciplinary Music Studies. Bergen  
University College, Bergen, Norway.
- Oct. 2011 *Technology and a 21st Century music education.*  
New England Area Collegiate MENC Symposium on Music  
Education. University of Southern Maine, Gorham, ME.
- Jan. 2009 *Learning and teaching music at the intersection of creativity and  
technology.*  
Michigan Music Technology Conference, Grand Rapids, MI.
- Nov. 2008 *Creativity and prosumer cultures: Challenges for 21st Century  
schooling & parenting.*  
Interdisciplinary & Creative Arts Education Summit, Hong Kong  
Institute of Education, Hong Kong, China.
- April 2007 *Learning and teaching music with technology: Stories from  
practice and research.*  
Bergen Interactive Music Conference, Bergen, Norway.

#### **d. Other Peer Review**

- 2016** Proposal Reviewer: ISME Music in Schools and Teacher  
Education Commission. July 2016. Dublin, Ireland.
- Proposal Reviewer: International Society for Music Education 32nd  
World Conference. July 2016. Glasgow, Scotland.
- 2012** Book Chapter Reviewer: Barrett, M. (Ed.). *Creative  
collaboratorium.*
- Book Proposal Reviewer: Williams, D. A. *A new paradigm in music  
education: Reexamining the profession.* Oxford University Press.

Program Reviewer: University of Queensland School of Music.  
Brisbane, Australia.  
Provide an external review of documents and evaluation of the strategic vision for the UQ School of Music as part of their 7 year internal review process.

2012 Chapter Technical Reviewer: Brown, A. & Manaris, B. (in press). *Introduction to computing: Making music with python*. Boca Raton, FL: Chapman & Hall/CRC.

Chapter Reviewer: Brown, A. R. (Ed.). (2012). *Sound musicianship: Understanding the crafts of music*. Newcastle, UK: Cambridge Scholars Press.

2012 Proposal Reviewer: Australasian Computer Music Conference. July 2012. Brisbane, Australia.

2011 Proposal Reviewer: CreateWorld 2011. Apple University Consortium. November 2011. Brisbane, Australia.

Proposal Reviewer: Society for Research in Music Education Summer Research Symposium. June, 2011. Washington, DC.

Proposal Reviewer: International Society for Music Education 30th World Conference. July 2012. Thessaloniki, Greece.

Panelist: BMI Foundation John Lennon Songwriting Scholarship. Adjudicated original song compositions and performances for \$20,000 in scholarships.

Program Reviewer: Post-Baccalaureate Music Educator Licensure Program, Westfield State University.  
Review documents as part of the music teacher education licensure review for the Massachusetts Department of Elementary & Secondary Education.

2010 Proposal Reviewer: 8th Asia-Pacific Symposium on Music Education Research. April, 2011. Taipei, Taiwan.

Book Reviewer: Watson, S. (2011). *Using technology to unlock musical creativity*. New York: Oxford University Press.

Chapter Reviewer: MacKinlay, L. (Ed.). (2011). *Songs of resilience*. Newcastle: Cambridge Scholars Press.

Chapter Reviewer: G. McPherson & G. Welch (Eds.), *Oxford Handbook of Music Education*. New York: Oxford University Press.

- 2009 Book Proposal Reviewer: Watson, S. *Unlocking musical creativity through technology*. New York: Oxford University Press.
- 2008 Chapter Reviewer: Ballantyne, J. & Bartleet, B-L. (Eds.). (2010). *Navigating music and sound education*. Newcastle Upon Tyne, UK: Cambridge Scholars Press.
- 2007 Proposal Reviewer: Arts & Learning and Music Education SIGs. American Educational Research Association Conference.
- 2006 Proposal Reviewer: International Society of Learning Sciences (ISLS) Conference.
- 2005 Book Reviewer: DeGraffenreid, G., Fowler, C., Gerber, T., & Lawrence, V. (2006). *Music! Its role and importance in our lives*. New York: Glencoe/McGraw-Hill.



## RESEARCH AND SCHOLARSHIP

### Awards & Nominations

**Jan 2017** 2017 Technical Excellence & Creativity (TEC) Nominee for inaugural Audio Education Technology Award for *Groove Pizza*. National Association of Music Merchants (NAMM). Los Angeles, CA.

### Grants, Contracts, & Gifts - \$1,129,133 since Fall 2013

**Feb 2017** New York Philharmonic: Variation Playground Phase II - **\$56,000**

**Dec 2016** Steinhardt Dean Award for Technology Development - **\$40,000**

Ed Sullivan Fellows Program follow up gift from Robert Precht - **\$19,000**

Classical Music Engagement inaugural gift - Maxine & Stuart Frankel Foundation Fund - **\$25,000**

**Oct 2016** New York Philharmonic: Variation Playground Phase I - **\$68,000**

Chamber Music Society of Detroit: Jazz Interactive Learning Packages - **\$5,000**

**Sept 2016** Digital Media & Learning Competition 6/MacArthur Foundation: Sonic Explorations Project (with Evan Tobias, Arizona State University) - **\$85,000**

Urban Arts Partnership: FreshEd Web App Contract - **\$15,000**

Rock & Roll Forever Foundation Soundbreaking Project - **\$10,000**

**July 2016** National Science Foundation: ThinkTank (Graduate Consortium) at ISMIR 2016 - PI - **\$25,635**

Steinhardt Dean Award for Technology Development - **\$40,000**

**Mar. 2016** Theolonius Monk Institute for Jazz - *MathScienceMusic.org* - **\$41,600**

**Jan. 2016** NYC Media Lab Combine Accelerator - *MusEDLab*. - **\$25,000**

Ed Sullivan Fellows Program inaugural gift from Robert Precht - **\$38,000**

- May. 2015** Urban Arts Partnership: *FreshEd Web App Contract* - PI - **\$35,000**  
 Chamber Music Society of Detroit: *Digital Music Education Project* - PI - **\$50,000**
- Feb. 2014** Urban Arts Partnership: *SmARTBomb Contract* - PI - **\$4000**
- Dec. 2014** National Science Foundation: *I-Corps: Wireless Invention Kits and Media Engagement Platform* - PI - **\$50,000**
- Sept 2014** Little Kids Rock Instrument Grant - **\$15,000**
- May 2014** NYU Steinhardt - Full Time Professional Development Fund - **\$3500**
- Apr. 2014** National Science Foundation: *ThinkTank (Doctoral Consortium) at ICAD 2014* - PI - **\$22,403**
- Fall 2013** Peer 2 Peer University, MOOC development contract - **\$15,000**
- Aug. 2011** National Science Foundation: DUE TUES Award #1118435: *Computational Thinking through Computing and Music* - **\$449,995.**  
 Co-Pi with J. Heines (PI), G. Greher (Co-PI).
- Jan. 2013 Community Co-op Mentor Grant, UMass Lowell - \$2,500
- Dec. 2012 Service-Learning Mini-Grant, UMass Lowell - \$1,955  
 PI - Purchase equipment for Practical Accompanying course.
- May 2012 Creative Economy Initiatives Fund Grant, University of Massachusetts President's Office: *Reinventing the City: Assessing Economic and Cultural Development Strategies in Lowell* - \$28,500  
 Co-PI with John Wooding (PI), Paul Marion, George Chigas, Phil Moss, Jehanne-Marie Gavarini, & LZ Nunn.
- Oct. 2011 University of Queensland International Collaborative Research Travel Award - \$3,170  
 PI. Conduct a study entitled: *Negotiating identities: Music teachers, technology, and professional development* with Dr. Julie Ballantyne at the University of Queensland.
- May 2011 Joseph. P. Healey Endowment: *Music Technology Partnerships: Is There an App for That?* - \$9,988.  
 Co-PI with G. Greher (PI - UMass Lowell) and S. Burton (Co-PI - University of Delaware).

- April 2011 UMass Lowell Center for Irish Partnerships: *Travel funding to Ireland to pursue development of a joint graduate certificate in Technology, Arts, & Learning* - \$500.
- Mar. 2011 Google, Inc. *CS4HS at UMass Lowell: A Workshop and Conference for High School Computer Science Teachers* - \$15,000.  
Senior Personnel with F. Martin (PI), J. Heines, J. Canning, K. Daniels, G. Grinstein, B. Kim, K. Powers, B. Liu, and H. Levkowitz.
- April 2010 Teaching and Learning Grants: *Researching the music of Lowell: Living digital ethnomusicology with UMass Lowell students* - \$4,000.  
PI.
- Aug. 2009 Australasian Collaborative Research Center for Interaction Design (ACID). *Jamskolan '09: International Workshop and Symposium on Arts Education through network jamming with generative media*.  
Research and travel funding for me and graduate student Anthony Beatrice. - \$8,000. Co-PI with Andrew Brown, Steve Dillon, & Matthew Thibeault.
- Feb. 2009 Teaching and Learning Grants: *Faculty Learning Community: Developing and testing multi-sensory, active and arts-based learning in higher education* - \$4,500.  
Co-PI with UMass Lowell professors Sarah Kuhn, Robert Kunzendorf, David Kazmer, Fred Martin, & Judith Davidson.
- Jan. 2009 National Science Foundation Broadening Participation in Computing Travel Grant - \$585.  
Support to attend annual project meeting in Charlotte, NC.
- 2008-2010 National Science Foundation C-PATH CB Award #0722161: *Performamatics: Connecting Computer Science to the Performing, Fine, and Design Arts* - \$421,087.  
Senior Personnel, working with PI Jesse Heines and Co-PIs Gena Greher and Fred Martin.
- Nov. 2007 Center for Instruction, Research and Technology (CIRT) Technology Innovations Mini-Grant - \$3,790  
Indiana State University – Co-PI with Dr. Dennis Ballard.  
Electronic video and audio recording and digitization equipment for the development of digital online teaching portfolios and the production of streaming multimedia teaching materials.

- 2006 Musical Futures Project/dBass.org case study contract - \$1,890. Leeds, UK.  
In-kind use of dBass.org collaborative learning website for case study with Vigo County middle school students.
- 2006 Grieg Music Education/Musicdelta.com case study contract - \$2,100. Bergen, Norway.  
In-kind use of musicdelta.com collaborative learning website for case study with Vigo County middle school students.
- 2001 Roomware Grant - \$2,500  
SmarterKids Foundation, Calgary, AB.  
Studied the nature of music students' interaction with a digital whiteboard and music software (with Jackie Wiggins).

## Academic and Professional Publications

### a. Refereed Publications & Juried Residency

#### International Juried Artistic Residency

Studio for Electro-Instrumental Music (STEIM) - July 25 - August 8, 2012.  
Amsterdam, Netherlands. <http://steim.org/>.

#### Edited Handbooks

**Ruthmann, S. A.**, & Mantie, R. (2017) *The Oxford Handbook on Technology in Music Education*. New York: Oxford University Press.

King, A., Himonides, E., & **Ruthmann S. A.** (2017) *The Routledge Companion to Music, Technology and Education*. London: Routledge.

#### Book Chapters

**Ruthmann, S. A.** (Updated 2nd Edition, 2017). Exploring new media musically and creatively. In R. Murphy and P. Burnard (Eds.), *Teaching music creatively*. London: Routledge.

**Ruthmann, S. A.**, Tobias, E., Randles, C., & Thibeault, M. (2015). Is it the technology? Challenging technological determinism in music education. In C. Randles (Ed.). *Navigating the future* (pp. 122-132). New York: Routledge.

**Ruthmann, S. A.** (2013). Exploring new media musically and creatively. In R. Murphy and P. Burnard (Eds.), *Teaching music creatively* (pp. 85-97). London: Routledge.

**Ruthmann, S. A.** (2012). Engaging adolescents with music and technology. In S. Burton (Ed.), *Engaging musical practices: A source book for middle school general music* (pp. 177-92). Lanham, MD: Rowman & Littlefield.

**Ruthmann, S. A.** & Dillon, S. C. (2012). Technology in the lives and schools of adolescents. In G. McPherson & G. Welch (Eds.). *Oxford handbook of music education* (pp. 529-47). New York: Oxford University Press.

**Ruthmann, S. A.** & Hebert, D. G. (2012). Music learning and new media in virtual and online environments. In G. McPherson & G. Welch (Eds.). *Oxford handbook of music education* (pp. 567-83). New York: Oxford University Press.

**Ruthmann, S. A.** (2007; 2nd printing in 2009; third printing in 2010). Strategies for supporting music learning through online collaborative technologies. In J. Finney & P. Burnard (Eds.), *Music education with digital technology* (pp. 131-41). London: Continuum Press.

Wiggins, J., Wiggins, R., & **Ruthmann, S. A.** (2005). Collaborative creating and pre-service generalist teachers' emergent musical self-efficacy. In M. Mans & B. W. Leung (Eds.), *Music in schools for all children: From research to effective practice* (pp. 79-85). Granada, Spain: University of Granada Press.

## Journal Articles

Abeles, H., Benedict, C., Bernard, C., Burkhalter, K., Gould, E., **Ruthmann, S. A.**, & Soto, A. (2013). Thinking beyond curriculum and pedagogy. *College Music Symposium*, 53. Retrieved from [http://symposium.music.org/index.php?option=com\\_k2&view=item&id=9699:thinking-beyond-curriculum-and-pedagogy&Itemid=126](http://symposium.music.org/index.php?option=com_k2&view=item&id=9699:thinking-beyond-curriculum-and-pedagogy&Itemid=126)

Greher, G. & **Ruthmann, S. A.** (2012). On chunking, simples and paradoxes: Why Jeanne Bamberger's research matters. *Visions of Research in Music Education*, 20, February 2012.

**Ruthmann, S. A.** (2011). *Movement 1 - Pärt from Scratch Etudes* (2010) [DVD and Program Notes]. *Computer Music Journal*, 35(4), 127-128; DVD Track 17.

Heines, J., Greher, G., Ruthmann, S. A., Reilly, B. (2011). Two approaches to interdisciplinary computing+music courses. *IEEE Computer*, 44(12), 25-32.

Ruthmann, S. A. (2008). Whose agency matters? Negotiating pedagogical and creative intent during composing experiences. *Research Studies in Music Education*, 30(1), 43-57.

Ruthmann, S. A. (2007) The composers' workshop: An emergent approach to composing in the classroom. *Music Educators Journal*, 93(4), 38-43.

Wiggins, J., Blair, D., Ruthmann, A., & Shively, J. (2006). A heart to heart about music education practice. *The Mountain Lake Reader: Conversations on the Study and Practice of Music Teaching*, 4, 81-92.

Ruthmann, S. A. (2005). Lessons taught and lessons learned: What my students have taught me about teaching music in a technology lab. *Journal of Technology in Music Learning*, 3, 43.

### **International Refereed Conference Papers**

Ruthmann, S. A. (2016). *Designing Technologies and Experiences for Music with and for Youth in the MusEDLab*. 32nd World Conference of the International Society for Music Education. Glasgow, Scotland.

Hallas, T., Gower, A., Ruthmann, A., & Williams, David A. (2016). *Mobile computing in music education*. Symposium panel at the 32nd World Conference of the International Society for Music Education. Glasgow, Scotland.

Ruthmann, S. A. (2016). *MISTEC Interactive Unconference Symposium*. Symposium panel at the 32nd World Conference of the International Society for Music Education. Glasgow, Scotland.

Ruthmann, S. A., Cunha, E., & Johnsen, G. (2014). *Connecting and creating global music communities in the cloud*. 31st International Society for Music Education (ISME) World Conference. Porto Alegre, Brazil.

Ballantyne, J., Beche, C. M., Randles, C., Ruthmann, S. A., & Saether, E. (2014). *Music in schools and teacher education: Exemplary approaches and future directions*. 31st International Society for Music Education (ISME) World Conference. Porto Alegre, Brazil.

**Ruthmann, S. A.** (2014). *Researching youth music collaboration on the Noteflight.com collaborative forums*. SEMPRE Researching Music & Technology Conference. University of London Institute of Education. London, UK.

**Ruthmann, S. A.** (2013). *Making mobile musical Instruments with the MaKey MaKey, Scratch, and Echonest*. Proceedings of the First Virtual Conference of the Music Technology Special Interest Group, International Society for Music Education. Indianapolis, IN.

**Ruthmann, S. A.**, & Swanson, B. (2012). *Partnerships and practices: Exploring the roles of producer and engineer with pre-service music educators*. Institute for Contemporary Music Performance Rock & Roles Conference. London, UK.

**Ruthmann, S. A.**, & Ballantyne, J. (2012). *Negotiating identities: Music teachers, technology, and professional development*. Proceedings of the 30th International Society for Music Education (ISME) World Conference. Thessaloniki, Greece.

**Ruthmann, S. A.**, Greher, G., & Heines, J. (2012). *Real-world projects for developing musical and computational thinking*. Proceedings of the 30th International Society for Music Education (ISME) World Conference. Thessaloniki, Greece.

**Ruthmann, S. A.**, & Swanson, B. (2012). *Exploring the neglected musical dimensions of timbre and space: A window into the creative thinking of producers and engineers*. Proceedings of the 18th International Music in Schools and Teacher Education Commission (MISTEC) Seminar. University of Thrace, Komotini, Greece.

Heines, J. M., Greher, G. R., & **Ruthmann, S. A.** (2012). *Techniques at the intersection of computing and music*. Proceedings of the 17th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE). Haifa, Israel.

**Ruthmann, S. A.**, & Greher, G. (2011). *Sound thinking: Evaluating the effectiveness of interdisciplinary collaborations among students and faculty in music education and computer science*. Proceedings of the Seventh International Research in Music Education Conference. University of Exeter, Exeter, UK.

Dillon, S., Myllykoski, M., **Ruthmann, S. A.**, (2011). Thorgersen, Väkevä, L. *An examination of affordances of the application of "open source" to music education*. Proceedings of the Seventh International Research in Music Education Conference. University of Exeter, Exeter, UK.

Ruthmann, S. A. (2011). *Learning to teach composing with LEGO: A hands-on workshop exploring the affordances and constraints of compositional task design and assessment*. Proceedings of the Seventh International Research in Music Education Conference. University of Exeter, Exeter, UK.

Ruthmann, S. A., Burnard, P., Dillon, S., Leong, S., McPherson, G., Saether, E., & Thibeault, M. (2010). *The network jamming project: An international study of collaborative media performance*. Proceedings of the International Society for Music Education (ISME) World Conference, Beijing, China.

Schmidt, P., Ruthmann, S. A., Thibeault, M., McPherson, G. (2010). *Reflective teaching and new technological thinking: Implications for 21<sup>st</sup> Century learning practices*. Proceedings of the International Society for Music Education (ISME) World Conference, Beijing, China.

Hebert, D. & Ruthmann, S. A. (2010). *New technologies as tools for supporting cultural diversity in music education*. Proceedings of the 10<sup>th</sup> Conference on Cultural Diversity in Music Education. Sydney Conservatorium, University of Sydney, Sydney, Australia.

Dillon, S., Burnard, P., Ruthmann, S. A., & Saether, E. (2009). *Here's a new instrument how would you use it? A comparison of six case studies examining the co-development of the jam2jam software instrument and experience design in schools in four countries*. Proceedings of the Sixth International Research in Music Education Conference, University of Exeter, Exeter, UK.

Hebert, D. & Ruthmann, S. A. (2009). *Guerilla musicianship: Harnessing collective musicianship in a (re)emerging read/write culture*. Proceedings of the Nordic Network for Music Informatics, Performance and Aesthetics, University of Southern Denmark, Esbjerg, Denmark.

Ruthmann, S. A., Burnard, P., Finney, J., Dillon, S., Leong, S., Seddon, F. (2008). *Music education with digital technology: Changing identities, researching digital classrooms, and strategies for change*. Proceedings of the International Society for Music Education (ISME) World Conference, Bologna, Italy.

Ballantyne, J., Harrison, S., Dillon, S., Ruthmann, S. A. Saether, E. (2008). *International perspectives on pedagogies of inclusion in music education: Theorising practice*. Proceedings of the International Society for Music Education (ISME) World Conference, Bologna, Italy.



Ruippo, M., Lundstrom, H., Rees, F., Leong, S., Ruthmann, S. A., & Salavuo, M. (2008). *Welcome to METNet: Initiating a new era of international collaboration and cooperation for music educators*. Proceedings of the International Society for Music Education (ISME) World Conference, Bologna, Italy.

Ruthmann, S. A. (2007). *Negotiating learning and teaching in a music technology lab: Curricular, pedagogical, and ecological issues*. Proceedings of the Fifth International Research in Music Education Conference, University of Exeter, Exeter, UK.

Ruthmann, S. A. (2007). *Learner agency and teacher feedback in composing experiences*. Symposium on Learner Agency. Proceedings of the Fifth International Research in Music Education Conference, University of Exeter, Exeter, UK.

Ruthmann, S. A. (2006). *Remedying the chronic neglect of our students' musical lifeworlds*. MayDay Group Symposium. Proceedings of the International Society of Music Education (ISME) Conference, Kuala Lumpur, Malaysia.

Espeland, M., Burnard, P., Johnsen, G., Arnesen, I., & Ruthmann, S. A. (2006). *Creative music education in schools and an Internet-based educational environment: What are the possibilities and challenges and how will music education be affected?* Proceedings of the International Society of Music Education (ISME) Conference, Kuala Lumpur, Malaysia.

Ruthmann, S. A. & Bizub, S. (2006). *The Internet and the nature of collaborative experience: Cross-cultural composing among students in Japan and the United States*. Proceedings of the International Society of Music Education (ISME) Conference, Kuala Lumpur, Malaysia.

Ruthmann, S. A. (2004). *Learning through meaningful engagement with the world of sound: Connecting to students' sound worlds*. Proceedings of the International Society for Music Education (ISME) Conference, Tenerife, Canary Islands, Spain.

### **National Refereed Conference Papers**

Wogaman, S., Ruthmann, S. A., Richardson, A., & Wiggins, J. (2017). *Education overdrive: Using online technology to enhance live programming in schools*. Chamber Music America. New York, NY.

Ruthmann, S. A. (2014). *Play With Your Music: A look inside the creation, facilitation, and revision of a creative music production MOOC*. New Directions in Music Education Conference. Michigan State University. East Lansing, MI.

Gennarelli, V., Carson, S. Rusk, N., & **Ruthmann, S. A.** (2014). *Play with your MOOC: One open tool, 3 different flavours of learning*. Digital Media & Learning Conference. Boston, MA.

**Ruthmann, S. A.**, Crain, T., Michaelsen, G., & Williams, A. (2013). *(Re)Imagining core music curriculum for the twenty-first century musician*. Proceedings of the College Music Society annual conference. Cambridge, MA.

**Ruthmann, S. A.**, Bulla, W., & Olson, A. (2013). *Accreditation, certification, and licensure: A place in audio education?* Proceedings of the Audio Engineering Society 50th Conference in Audio Education. Murfreesboro, TN.

**Ruthmann, S. A.** (2013). *Partnerships & practices: Exploring the creative practices of audio engineers and producers*. Proceedings of the Suncoast Music Education Research Symposium (SMERS) IX. University of South Florida. Tampa, FL.

**Ruthmann, S. A.** & Swanson, B. (2012). *Exploring the neglected musical dimensions of timbre and space: A window into the creative thinking of producers and engineers*. Proceedings of the Association for Technology in Music Instruction (ATMI) annual conference. San Diego, CA.

**Ruthmann, S. A.**, Randles, C., Thibeault, M., & Tobias, E. (2012). *Is it the technology? Challenging technological determinism in music education*. Proceedings of the Association for Technology in Music Instruction (ATMI) annual conference. San Diego, CA.

Greher, G., **Ruthmann, S. A.**, Gallant, H., & Poster, E. (2011). *iPads in the music classroom: A tool for fostering collaboration*. Proceedings of the Association for Technology in Music Instruction (ATMI) annual conference. Richmond, VA.

**Ruthmann, S. A.**, Heines, J, Greher, G., Laidler, P, & Saulters, C. (2010). *Teaching computational thinking through musical live coding in Scratch. Proceedings of the 41<sup>st</sup> ACM Technical Symposium on Computer Science Education*, 351-55. New York: ACM.

Arcus, D. & **Ruthmann, S. A.** (2010). *Tales from the dorm: Living and learning in residence with honors students*. Proceedings of the National Collegiate Honors Council Annual Conference. Kansas City, MO.

Heines, J. & **Ruthmann, S. A.** (2010). *Exploring computational and musical thinking through musical live coding with kids in Scratch*. Proceedings of the Scratch@MIT 2010 conference. Media Lab, Massachusetts Institute of Technology, Cambridge, MA.

Ruthmann, S. A. (2010). *No red ink: Creative composing experiences within an Introduction to Music Education course*. Proceedings of the Biennial Music Educators National Conference/Society for Research in Music Education Conference. Anaheim, CA.

Ruthmann, S. A. & Heines, J. (2009). *Designing music composing software with and for middle school students: A collaborative project among senior computer science and music education majors*. Proceedings of the Association for Technology in Music Instruction (ATMI) annual conference, Portland, OR.

Schmidt, P., Ruthmann, S. A., & Thibeault, M. (2009). *Reflective teaching and new technological thinking: Implications for 21<sup>st</sup> Century practices*. Proceedings of the Society for Music Teacher Education annual conference, University of North Carolina-Greensboro.

Ruthmann, S. A. (2008). *The ecology of a middle school music technology lab: Tensions among creative process, technology design, and implementation*. Proceedings of the Creativity Special Research Interest Group, National Association of Music Education (MENC) Biennial In-service, Milwaukee, WI.

Ruthmann, S. A. (2007). *Whose agency matters? Negotiating pedagogical and creative intent during composing experiences*. Proceedings of the Second Conference on Music Learning and Teaching, Center for Applied Research in Musical Understanding (CARMU), Oakland University, Rochester, MI.

Ruthmann, S. A. (2005). *The composers' workshop: A constructivist approach to learning and teaching in technology-infused secondary general music*. Proceedings of the Mountain Lake Colloquium for Teachers of General Music Methods, Mountain Lake, VA.

Ruthmann, S. A. (2005). *Supporting individual composing in collaborative environments*. Proceedings of the First International Conference on Music Learning and Teaching, Center for Applied Research in Musical Understanding (CARMU), Oakland University.

Ruthmann, S. A. (2005). *Inside the composers' workshop: Developing authentic composing experiences with technology*. Proceedings of the New Directions in Music Education: 2nd International Conference on Teaching Composition and Improvisation, Michigan State University, East Lansing, MI.

Wiggins, J., Blair, D., Ruthmann, S. A., & Shively, J. (2005). *A heart to heart about music education practice*. Proceedings of the Mountain Lake Colloquium for Teachers of General Music Methods, Mountain Lake, VA.

Lucas, R., & Ruthmann, S. A. (2004). *Integrating artistic concepts and processes in a curriculum for elementary teachers through creative movement, music, and theatre experiences*. Proceedings of the National Dance Education Organization (NDEO) Annual Conference, East Lansing, MI.

Ruthmann, S. A. (2004). *Enabling emergent musical creativity in a class for elementary education majors*. Proceedings of the Society of Research in Music Education Creativity SRIG, National Association for Music Education (MENC) Biennial In-service, Minneapolis, MN.

Ruthmann, S. A., & Myers, R. (2003). *Tuning the band by ear*. Proceedings of the Midwest International Band and Orchestra Clinic, Chicago, IL

Ruthmann, S. A. (2003). *Audio recording for the elementary music teacher*. Proceedings of the National Association for Music Education (MENC) Eastern Division Regional Conference, Providence., RI.

Ruthmann, S. A. (2003). *Making music and Super Duper Music Looper: Creative software for the elementary classroom*. Proceedings of the National Association for Music Education (MENC) Eastern Division Regional Conference, Providence, RI.

Ruthmann, S. A. (2002). *Improvising with the MIDIPartner system*. Proceedings of the National Association for Music Education (MENC) Biennial In-service, Nashville, TN.

Ruthmann, S. A. (2002). *A general music teacher's guide to music technology in the classroom*. Proceedings of the National Association for Music Education (MENC) Biennial In-service, Nashville, TN.

Ruthmann, S. A. (2002). *The MIDIPartner system: An effective approach to integrating technology in the music classroom*. Proceedings of the National Association for Music Education (MENC) Biennial In-service, Nashville, TN.

## **b. Non-Refereed Publications**

### **Special Issue Editorials**

Greher, G. & Ruthmann, S. A. (2012). Curiosity, Creativity and Cognition: A Window Into Jeanne Bamberger's Work. *Visions of Research in Music Education*, 20, January 2012. <http://www.rider.org/~vrme/>.

Thorgersen, K., Väkevä, L., Myllykoski, M., Dillon, S., & Ruthmann, S. A. (2012). Special Issue: Open Source. *Journal of Music, Technology & Education*, 5(2).

### Invited Publications

Adkins, B., Bartleet, B., Brown, A., Foster, A., Hirche, K., Procopis, B., Ruthmann, A., & Sunderland, N. (2012). Music as a tool for social transformation: A dedication to the life and work of Steve Dillon. *International Journal of Community Music*, 5(2),189-208.

Ruthmann, A. (July, 2009). Socially Networked Creativity in a (Re)Emerging Read/Write Culture. Online video feature at *Curriculum Theory* social network. <http://curriculumtheory.ning.com/>.

Ruthmann, A. (September, 2006). Create a music technology lab on a budget. *Glencoe ArtNotes*, 1(1). Retrieved from <http://www.glencoeartnotes.com/teachertalk/#budget>

### c. Published Curriculum Materials

Ruthmann, S. A., Hein, E., Swanson, B., & Gennarelli, V. (2013-Present). *Play With Your Music* [online course]. P2PU & New York University. <http://playwithyourmusic.org/>

Multiple Authors. (Ruthmann, A., contributing author). (2005). *Making music with technology*. (Teacher editions for grades 1, 2, 3, 4, 5, 6, 7 & 8). Glenview, IL: Silver Burdett Ginn/Scott Foresman.

### d. Technology & Software Design & Development

Ruthmann, S. A. & MusEDLab. (2016). *Variation Playgrounds*. [computer software]. Client: New York Philharmonic.

Ruthmann, S. A., Sigal, J., & MusEDLab. (2016). *Soundbreaking Audio Widgets*. [computer software]. Client: Rock & Roll Forever Foundation.

Ruthmann, S. A. & MusEDLab. (2016). *MusEDBox Private Web Server*. [computer software & hardware].

Ruthmann, S. A., Hein, E., & MusEDLab. (2016). *GroovePizza v2.0* [computer software]. Client: Theolonius Monk Institute of Jazz.

Hein, E., & Ruthmann, S. A. (2016). *Music Theory for Producers*. [soundfly.com](http://soundfly.com). [curriculum and computer software]

**Ruthmann, S. A.** & MusEDLab. (2016). *Fresh Annotator*. For Urban Arts Partnership. New York. [computer software]

**Ruthmann, S. A.** & Yrjan Tangenes. (2016). *Mobile interfaces for NY Phil archives*. MusIT, MusEDLab, and NY Philharmonic. [computer software]

**Ruthmann, S. A.** & MusEDLab. (2016). [MathScienceMusic.org](http://MathScienceMusic.org) and *GroovePizza Shapes*. [computer software]

**Ruthmann, S. A.** (2015). *MusEDLab Design Kit*. Design kit and interfaces for prototyping new products, services, pedagogies and curricular experiences.

**Ruthmann, S. A.** & MusEDLab. (2015). Chamber Music Society of Detroit & Aeolus String Quartet *Music Engagement Interfaces* [computer software].

Hein, E., November, A., **Ruthmann, S. A.**, & MusEDLab. (2015). *Groove Pizza v1.0* [computer software]

**Ruthmann, S. A.** & MusEDLab. (2014). *aQWERTYon* [computer software].

**Ruthmann, S. A.** & Wogaman, S. (2014). *Virtual Piano* [interactive website]. <http://cmsd.musedlab.org/>.

**Ruthmann, S. A.** (2013). PWYM Remix [interactive website]. Interactive web-based multitrack mixing tool - <http://www.nyu.edu/projects/ruthmann/PWYM/airtraffic/>

Maloney, J., Rosenbaum, E., Heines, J., & Ruthmann, S. A. (2011). MIDI & Music Extensions for Scratch 2.0. Development and implementation of MIDI music extensions for Scratch 2.0 in collaboration with the MIT Media Lab.

Ruthmann, A. & Heines, J. (2010). Music Computation Code - Making Music with Scratch. <http://www.scratchmusic.org/>

Ruthmann, A. (2002). *Tuning Partner Intonation Training CD*. MusicPartner, LLC. Audio CD-based intonation practice system that develops harmonic and melodic intonational acuity and flexibility by ear.

Ruthmann, A. (1997). EZ I/O Max/MSP Sensor Interface Software. NIQ, Inc. <http://www.ezio.com>.

## Other Research, Reports, Creative Activities, & Research Consulting

### a. Research Reports

Gennarelli, V., **Ruthmann, S. A.**, et al. (2014). Play With Your Music: Whitepaper Report. Retrieved from <http://reports.p2pu.org/reports/PWYM/>.  
Ruthmann, S. A. (2006). *Negotiating learning and teaching in a music technology lab: Curricular, pedagogical, and ecological issues*. Unpublished doctoral dissertation. Oakland University, Rochester, Michigan

Ruthmann, S. A. (2002). *Technology in general music education: A constructivist approach grounded in an experience-based philosophy of music education*. Unpublished masters thesis. Oakland University, Rochester, Michigan.

Wiggins, J., & Ruthmann, A. (2002). *Music teachers' experiences learning through SMARTBoard technology*. SmarterKids Foundation (Canada): [http://downloads.smarttech.com/media/sitecore/en/pdf/research\\_library/music/music\\_teachers\\_experiences-learning\\_through\\_smart\\_board\\_technology.pdf](http://downloads.smarttech.com/media/sitecore/en/pdf/research_library/music/music_teachers_experiences-learning_through_smart_board_technology.pdf)

### b. Program, Curriculum, & Conference Development

**Jan 2016- Present** ***Ed Sullivan Fellows Program.***  
Weekly music and industry mentoring program for NYC teens hosted at NYU Steinhardt and funded by the family of Ed Sullivan.

**Aug 2014- Present** ***Music Experience Design Conference.***  
*formerly IMPACT Conference*  
Annual international conference bringing together music and arts educators, students, non-profits, and industry partners to showcase the cutting edge in interactive music and arts education technology applications, curricula, and projects.

### c. Creative Activities

July 2012 *Scratch Etudes*, for musical live coding & computer.  
STEIM - Studio for Electro-Instrumental Music. Amsterdam.

Sept. 2011 *Beatbox*, multimedia composition for pre-recorded video/audio.  
119 Gallery, Lowell, MA. September 10, 2011.

Dec. 2009 *Scratch Etudes*, for musical live coding & computer.  
UMass Lowell Contemporary Electronic Ensemble concert.

- Nov. 2006 Performer (horn), Indiana State University Faculty and Student Brass Ensemble.  
40th Annual ISU Contemporary Music Festival.
- Apr. 2006 Composer, Incidental Music for Shakespeare's *Macbeth*  
Cranbrook Upper School Theatre Department, Cranbrook Schools, Bloomfield Hills, MI.
- 2004–2006 Live sound design.  
Oakland University Jazz Band and Jazz Singers.
- Nov. 2002 Conductor, Kirk Symphonia Concert.  
Kirk in the Hills Presbyterian Church, Bloomfield Hills, MI.
- Dec. 2001 Oakland University Concerto Competition Concert  
Soloist, *Concerto for Horn*, Karl Boelter - **American Premiere**.  
Pontiac-Oakland Symphony, Rochester, MI.
- Nov. 1999 *Barstow: 8 Hitchhiker Inscriptions from Alongside a Highway in Barstow, California*, by Harry Partch.  
Honors Thesis Project. Electro-acoustic realization with hand-built and custom-programmed microtonal instruments.
- July 1999 AREALE '99 Kunstpflug Festival, Linthe, Germany.  
Performances of original works with new sensor-integrated digital and acoustic instruments: the Wrench-o-phone and Klang-tone.
- July 1999 *Trio for Wrench-O-Phones No. 1*, (with Stephen Rush, Michael Rodemer and Christopher Peck) Berlin, Germany.  
The Wrench-o-phone is an electronic instrument built out of PVC pipe. Through integrated sensors, switches and by turning a wrench, embedded samples are morphed, mixed and output through built-in speakers or via external amplification.
- Apr. 1999 *Blues for Stanley*, granular synthesis.  
Elegy written on the death of Stanley Kubrick using spectral mapping, sampling and granular synthesis.
- Nov. 1998 *Fire!!!*, (with John Burkwall) Fourth Avenue Gallery New Genres Show, Ann Arbor, MI.  
Interactive music wall installation.
- Apr. 1998 *Antiphony*, (with Greg Laman and Mark Kirschenmann)  
International Computer Music Conference, Ann Arbor, MI.  
Interactive amplified/processed brass trio installation performance.



- Apr. 1998 *Revvin Up!*, University of Michigan Continuing Education Department, Ann Arbor, MI.  
Introduction and background music for University of Michigan continuing education videos.
- Nov. 1997 *Cage Dances*, Ann Arbor, MI.  
A piece for dancer, wearing an integrated sensor suit controlling pitch, an IR/ultrasonic space "cage" within which the dancer moved controlling lighting effects, and a string bass player improvising with the dancer's "melody" in an 8 channel surround-sound environment.
- July 1997 *Carillon Dances*, (with dancer Rubin Orneals) University of Michigan, Ann Arbor, MI.  
Outdoor dance choreography and audience movement interacted to control MIDI bell sequences in the Lurie Carillon.
- Mar. 1996 *Shards*, for orchestra. Kansas City Symphony Meet the Composer Commission.

#### **d. Grant Advisory Board**

- 2012- Present National Science Foundation DUE 1141033 *Earlier and broader access to machine learning*. Lillian Cassel, PI; Thomas Way & Paula Matuszek, Co-PIs. \$119,874.  
Consult and provide learning modules and data sets for machine learning in music and audio.

## INSTRUCTION RELATED ACTIVITY

### a. Visiting Academic Appointments

- June 2017** *Honorary Associate Professor*, University of Queensland. Brisbane, Australia
- June 2016** *Visiting Scholar*, Lebanon Valley College. Annville, PA
- Fall 2015** *Visiting Scholar*, James Madison University. Harrisonburg, VA.
- July 2015** *Visiting Lecturer*, China Conservatory. Beijing, China.
- Dec 2014** *Guest Researcher*, Institute for Cultural Industries, Shenzhen University. Shenzhen, China. (2014-2016)
- July 2014** *Visiting Professor*, Music Education Masters Program  
University of Michigan-Ann Arbor. Ann Arbor, MI.
- Spring 2012 *Visiting Fellow*, Queensland Conservatorium of Music.  
Griffith University, Brisbane, Australia.
- Visiting Fellow*, School of Music.  
University of Queensland, Brisbane, Australia.
- Visiting Faculty*, School of Media, Entertainment,  
Creative Arts, Music and Sound.  
Queensland University of Technology, Brisbane, Australia.
- July 2006 *Visiting Assistant Professor*, Summer Music Institute.  
Central Connecticut State University, New Britain, CT.

## Other Activity and Accomplishments Related to the Instructional Function

### a. Teaching Award

- 2012 Outstanding Teaching Award, UMass Lowell Music Department.

### b. Masters Thesis Chair

**2017 Marc Anderson**

**2016 Yi-Wen Lai-Tremewan.** *MusicMap: An Interface for Learning Improvisation*. M.M. in Music Technology, New York University.

**Markus Zakaria.** *The Edison Phonograph: digitally recreating three phonograph playback horns for transferred cylinders*. M.M. in Music Technology, New York University.

**Vitor Hirtsch.** *TrainEar: Rethinking computer-based technical ear training.* M.M. in Music Technology, New York University.

**David Tatasciore.** *Sound between movement: An ethnographic and technological study of electronic music producers in Philadelphia.* M.M. in Music Technology, New York University.

**2015 Marcus Cooper.** *Development of a rhythmic training application for classroom settings.* M.M. in Music Technology. New York University.

**Diana Castro.** *MMIO: Mindful Music Interactive Object: An attentional control training device as part of a meditative practice for emotion regulation.* M.S. in Interactive Digital Media. New York University.

**Julianna Mateyko.** *Community in the music classroom.* M.M. in Music Education. New York University.

**Toni Williams.** *SynthED M.P.C.: Developing an educational tool for learning mathematical variation equations using musical concepts.* M.M. in Music Technology. New York University.

**2014 Feynberg, Rebecca.** *Edison wax cylinder transfer degradation: Implications for preservation and archiving.* New York University.

**2014 Marse, Alex.** *Name that bird: An application for crowdsourcing the collection and identification of birdsong recordings.* M.M. in Music Technology. New York University.

**Dasilva, Leo.** *Merging formative and summative assessment: A testing platform for creating and applying interactive, objective tests for music education with immediate feedback.* M.M. in Music Technology. New York University.

**Liu, Ao.** *The Seven: A Max/MSP application designed to assist jazz musicians in odd meter improvisation.* M.M. in Music Technology. New York University.

**2013 Hein, Ethan.** *The drum loop: A constructivist iOS rhythm tutorial system for beginners.* M.M. in Music Technology. New York University.

**2012 Samiagio, Jason.** *Exploring the issues of retention and attrition through the perspectives of five Massachusetts band directors.* M.M. in Music Education. UMass Lowell.

- 2010 Hencke, Deborah. *A meta-analysis of brain research on music learning and teaching: Applications for early classroom instruction*. M.M in Music Education. UMass Lowell.
- 2009 Stone, Hallie. *The effects of movement on on-task behavior in an elementary music classroom*. M.M in Music Education. UMass Lowell.
- 2008 Sun, Jun-Ting. *International teacher perspectives on using computers to teach music*. M.M in Music Education. Indiana State University.

**c. Doctoral Dissertation Mentor**

- 2017 Willie Payne  
2016 Ethan Hein

**d. Doctoral Dissertation Committee Member**

- 2016 Michael Musick - PhD Music Technology (NYU)

**e. Doctoral Dissertation Opponent & Reader**

- 2017 Aleksi Ojalj - PhD Music, Sibelius Academy, Finland

**f. Doctoral Dissertation Outside Reader**

- 2017 Jaeseong Wook - PhD Music Composition (NYU)  
2016 Oriol Nieto - PhD Music Technology (NYU)  
Elissa Kay - PhD Piano Performance (NYU)  
2015 Sergi Casanelles - PhD Music Composition/Film Scoring (NYU)  
Eric Humphrey - PhD Music Technology (NYU)  
2014 Aron Glennon - PhD Music Technology (NYU)  
Eva Egolf - PhD Music Education (NYU)  
Andrew Krikun - PhD Music Education (NYU)

**g. Masters Thesis Auxiliary Supervisor**

- 2013 David Hayes, St. Patrick's College Drumcondra  
Dublin City University - Dublin, Ireland

**h. Masters Thesis Department Reader**

- 2016 Chris Moscato, Hsin Hwa Tai, Christopher Miller, Jordan Juras  
2009 Kristin Chartier, UMass Lowell  
2008 Cori Gaffney, UMass Lowell

**i. External Masters Research Thesis Reviewer**

2012 Hirche, Kathy (2012). *Meaningful musical engagement: The potential impact of generative music systems on learning experiences*. Unpublished masters thesis. Queensland University of Technology. Brisbane, Australia.

Boyle, Rosemary (2012). *Lying on the floor: Young peoples' approaches to creativity in the music classroom*. Unpublished masters thesis. University of Melbourne. Melbourne, Australia.

2009 Stephensen, Paul (2010). *Designing ePortfolios for music postgraduate study: A practice-led study*. Unpublished masters thesis. Queensland University of Technology, Brisbane, Australia.

## g. Invited Papers and Presentations

### International Settings

**July 2016** *Designing Technologies and Experiences for Music with Students and Educators*. Trinity College, Dublin, Ireland.

**July 2016** *Lowering Barriers to Creative Musical Expression*. Music in Schools and Teacher Education Commission Seminar. St. Patrick's College, Dublin, Ireland.

**Apr 2015** *The MusEDLab: Designing Technologies and Experiences for Music Making, Learning and Engagement*. TeknoDida Conference. Orivesi, Finland.

**Nov 2014** *Making Music with the MaKey MaKey and the Web*. Hong Kong Institute of Education. Hong Kong, China.

*The MusEDLab: Designing Technologies and Experiences for Music Making, Learning and Engagement*. Shenzhen University, Guondong, China.

**Feb 2014** *Extending the physical and temporal bounds of the K-12 music classroom through online collaborative technologies*. Professional Development in the Arts Webinar Series. Autonomous University of Chihuahua, Mexico.

**Nov 2013** *The more things change*. Panel presentation at the World Forum on Music. Queensland Conservatorium. Brisbane, Australia.

**July 2013** *Pedagogies for making music with new media*. NNIMIPA Seminar of the 3rd Annual Royal Musical Association's Music and Philosophy Study Group. Kings College London, UK.

- Mar 2013 *Tangible Approaches to Teaching Composing and Music Making with New Media.*  
Mary Immaculate College, University of Limerick, Ireland  
St. Patrick's College Drumcondra, Dublin City University, Ireland
- Researching New Media Musical Practices Online.*  
Mary Immaculate College, University of Limerick, Ireland
- July 2012 *New Media Musicianship: Inspiring Practices and Implications for Music and Arts Education.*  
Kodály Summer Institute, St. Patrick's College, Dublin, Ireland.
- Jun. 2012 *Researching New Media Musicianship.*  
Nordic Network for the Integration of Music Informatics, Performance and Aesthetics (NNIMPA) Seminar on Understanding Musicality. Bergen University College. Bergen, Norway.
- Jun. 2012 *New Media Musicianship: Inspiring Practices and Implications for Music and Arts Education.*
- Jun. 2012 Pedagogy, Language, Arts & Culture in Education Group Seminar. Faculty of Education, University of Cambridge, UK.
- Researching Musical Practices in Technological Contexts.*  
Graduate Music Education Seminar.  
Faculty of Education, Universidad Complutense de Madrid. Madrid, Spain.
- May 2012 *Negotiating Identities: Music Teachers, Technology and Professional Development.*  
with Julie Ballantyne. UQ School of Music Research Seminar. University of Queensland. Brisbane, Australia
- Mar. 2012 *Social Media Musicianship: Inspiring Practices and Implications for Music and Arts Education.*  
University of Melbourne Graduate School of Education Colloquia Series. Melbourne, Australia
- Feb. 2012 *Social Media, Music Technology and Creative Collaboration.*  
Creative Collaboratorium Seminar.  
School of Music, University of Queensland, Brisbane, Australia.
- Jan. 2010 *Musical live coding techniques for Scratch.*  
Presentation at the Australasian CRC for Interaction Design, Faculty of Creative Industries, Queensland University of Technology, Brisbane, Australia.

- Aug. 2009 *Exploring tangible and online collaborative tools for researching composing and composing pedagogy.*  
Presentation at the *Music Education Research Table*. University of Queensland, Brisbane, Australia.
- Aug. 2009 *Jamskolan '09: International perspectives on and contexts for meaningful musical engagement with collaborative generative music tools.*  
With Anthony Beatrice, graduate student, UMass Lowell/ Pentucket Regional High School. International Generative Media Systems Education Workshop and Symposium, Queensland University of Technology. Brisbane, Australia.
- May 2007 *Online interactive technologies for music learning and teaching.*  
Presentation at Stord Haugesund University College, Stord, Norway.

### **National Settings**

- May 2017** *Designing Technologies & Experiences for Music in the MusEDLab*  
LLK Chat. Lifelong Kindergarten Group. MIT Media Lab. Cambridge, MA.
- Oct. 2012 *Social Media Musicianship: Practices and Implications for Music Education*  
Creative & Critical Minds Scholar Series. Oakland University, Rochester, MI.
- May 2011 *Toward a Climate of Interdisciplinary Computing: Interdisciplinary Computing Workshop II.*  
National Science Foundation.  
Tucson, AZ.
- May 2011 *Technology and Music Education Practice*  
Guest lecture, School of Music, Arizona State University  
Tempe, AZ.
- Jan. 2011 *Interdisciplinary Computing Workshop I.*  
National Science Foundation.  
San Diego, CA.
- Jan. 2011 *Bridging STEM to STEAM: Creating new frameworks for art/ science pedagogy.*  
Rhode Island School of Design. Providence, RI.

- July 2010 *Exploring Scratch as a platform for musical live coding and sensor-integrated performance.*  
Presentation (with Jesse Heines) at the Lifelong Kindergarten Research Group. Media Lab, Massachusetts Institute of Technology. Cambridge, Massachusetts.
- Oct. 2009 *Online composing within music ensembles with Noteflight.*  
Presentation to the SUNY-Potsdam Latin Orchestra, Potsdam, NY.
- July 2009 *Discussing Whose Agency Matters: Composing in the Classroom.*  
Presentation to the *Composing Together* summer certificate program. University of Southern Maine, Gorham, ME.
- Jun. 2009 *Should we have National Standards for Music Technology Education?*  
Panel presentation with Mike Bates, Mike Blakeslee, Chad Criswell & Ben Hall. National Association for Music Education (MENC) Music Technology Academy. Arlington, VA.
- April 2009 *Creative music technology projects for music educators.*  
Presentations to students and local music teachers at the Crane School of Music, State University of New York (SUNY) at Potsdam.
- Sept. 2008 *Facilitating college music courses and professional development communities through social networks.*  
Workshop at the pre-conference on Web 2.0 social computing tools, Association for Technology in Music Instruction (ATMI), Atlanta, GA.
- May 2008 *Online teaching and Web 2.0 solutions: Applied principles from music education.*  
Presentation at the professional development in-service for faculty, Vincennes University, Vincennes, IN.
- Mar. 2008 International Journal of Education and the Arts Editors' Roundtable.  
Panel with L. Bresler, M. Latta, P. Sameshima & D. Hebert at the American Educational Research Association, New York, NY.
- Nov. 2007 The use of online collaborative tools in facilitating college music courses.  
Workshop at the pre-conference on learning technologies, Association of Technology in Music Instruction (ATMI), Salt Lake City, UT.



- Oct. 2006 Technology-infused interdisciplinary lessons for secondary general music.  
Presentation to Secondary General Music Methods Class, Oakland University, Rochester, MI.
- Apr. 2006 Assessing musical understanding musically and with technology. Presentation at the Pre-conference Special Focus Session on Assessment, National Association of Music Education (MENC) Biennial In-service, Salt Lake City, UT.
- Mar. 2004 Tuning and temperament from Pythagoras to Partch: A conductors' guide to ensemble intonation and tuning. Presentation to Kenneth Kiesler's graduate conducting studio, School of Music, University of Michigan, Ann Arbor, MI.
- Sept. 2003 Effective ways of using music technology in the music classroom. Collegiate MENC Chapter Speaker Series, Oakland University, Rochester, MI.
- Apr. 2003 New technologies for use in general music methods courses. Presentation for Central Michigan University music education faculty, Mt. Pleasant, MI.
- Apr. 2000 A conductor's guide to intonation and tuning: A primer on just intonation and intonational issues in ensemble rehearsal and performance.  
Conductors' Guild Regional Workshop, University of Michigan, Ann Arbor, MI.
- Developing intonational flexibility and heightened pitch awareness in individual practice.  
Presentation to the School of Music, University of Michigan, Ann Arbor, MI.

#### **h. Professional Development Workshop Presenter/Facilitator**

##### **International Settings**

- Nov 2013** Making Music with Scratch Workshop (with Andrew R. Brown). The Edge, State Library of Queensland. Brisbane, Australia.
- Mar 2013 Making Music with MaKey MaKey and Scratch. Mary Immaculate College, University of Limerick, Ireland
- July 2012 New Professionals Research Workshop 2: Community Music. International Society for Music Education World Conference. Thessaloniki, Greece.

- May 2012 World Scratch Day: Brisbane.  
The Edge, State Library of Queensland, Brisbane, Australia.  
Organized and taught one-day workshop for children and teachers on computing and music through Scratch.
- Sp. 2012 KMB201: Music Curriculum Studies 1.  
Series of 9 hour-long graduate lectures at Queensland University of Technology, Brisbane, Australia.
- Jan. 2012 MUSC 7730: Technology in Music Education.  
Intensive, 35 contact hour graduate summer course at the University of Queensland, Brisbane, Australia.
- July 2010 Young professionals' research workshop III: Technology in music education research.  
Symposium Chair and Discussant with Samuel Leong (Hong Kong Institute of Education) and Paul Draper (Griffith University/Queensland Conservatorium).
- July 1999 Sensing technologies for interactive art and music.  
Presentation at the Burg Giebichenstein Hochschule für Kunst und Design, Halle, Germany.

### **National, State and Community Settings**

- Mar. 2014** Panel Moderator, Startups are Fun! Turning a Personal Passion into a Business.  
NYU Entrepreneurs Festival, Stern School of Business.
- Jan. 2013 Connecting Assessment in Music to the Common Core.  
with Mike Medvinsky, Brandon Schools  
Transforming Minds 2013: Engaging Learners through Authentic Assessment: The Arts and Technology Mini-conference. Oakland Schools. Waterford, MI.
- Oct. 2012 From STEM to STE(A)M.  
Teaching for Musical Understanding Workshop Series. Oakland University, Rochester, MI.
- Oct. 2011 Working in Scratch: Putting STEAM in Cross-Curricular Collaboration.  
Presentation with Gena Greher at the CMS/ATMI Pre-Conference Technology Workshop. Richmond, VA.
- June 2011 Making Music with Scratch. *CS4HS at UMass Lowell: A Workshop and Conference for High School Computer Science Teachers*. Lowell, MA.  
(Co-presenter with Jesse Heines)

- June 2010 Recording and editing school music rehearsals.  
Parker Middle School, Chelmsford, MA.  
(Co-presenter with Jesse Heines)
- Dec. 2009 Online social media in the music classroom.  
Plymouth School District Unified Arts In-service, Plymouth, MA.
- Oct. 2009 Noteflight: A low/no budget tool for online music learning.  
Showcase presentation at the Music Technology Preconference,  
Association for Technology in Music Instruction (ATMI) Annual  
Conference, Portland, OR.
- Mar. 2009 Integrating technology, composing, and the arts: Student projects  
from the classroom.  
Massachusetts Music Educators Association (MMEA)  
Conference, Boston, MA.
- School-University partnerships in teaching music technology.  
(with Gena Greher and Pat Fitzpatrick). Massachusetts Music  
Educators Association (MMEA) Conference, Boston, MA.
- Feb. 2009 Music and Computing.  
(with Fred Martin). National Science Foundation Broadening  
Participation in Computing Annual PI Meeting, Charlotte, NC.
- Jan. 2009 Social networking for the music classroom.  
Michigan Music Conference, Grand Rapids, MI.
- Designing and supporting composing experiences.  
Michigan Music Conference, Grand Rapids, MI.
- Oct. 2008 Creative composing projects with technology.  
Massachusetts Collegiate MENC (MCMENC) Workshop, UMass  
Lowell, Lowell, MA.
- Jan. 2008 Podcasts, blogs, and wiki's...Oh my!  
Missouri Music Educators Association (MMEA) State Convention,  
Osage Beach, MO.
- Jan. 2008 Engaging technology-infused composing projects for the general  
music classroom.  
Missouri Music Educators Association (MMEA) State Convention,  
Osage Beach, MO.
- Out of the box: Indiana professional development institute in the  
digital arts – Conference Organizer  
Indiana Music Educators Association (IMEA) State Convention,  
Indianapolis, IN.

- June 2007 Using blogs and social networks to support music learning.  
Zionsville Middle School Music In-service, Zionsville, IN.
- Using online collaborative technologies to support music learning.  
17th Annual Music Technology Conference, IUPUI School of Music, Indianapolis, IN.
- Jan. 2007 Engaging technology-infused composing projects for the general music classroom.  
Indiana Music Educators Association (IMEA) State Convention, Indianapolis, IN.
- Podcasts, blogs, and wiki's...Oh my!  
Indiana Music Educators Association (IMEA) State Convention, Indianapolis, IN.
- Nov. 2006 Q&A about Indiana school music licensing.  
Vigo County School Corporation Music In-service. Terre Haute, IN.
- Apr. 2006 Cool music tools to energize your multimedia presentations.  
Presentation with Marj Haber at the Oakland Intermediate School District Power-Up! Educational Tech. Conference.
- Mar. 2006 Cool music tools to energize your multimedia presentations.  
Presentation with Marj Haber and Sheri Jaffurs at the Michigan Association for Computer Users in Learning (MACUL) Conference, Grand Rapids, MI.
- Jan. 2006 A look Inside two Michigan music technology classrooms.  
Presentation with Marj Haber at the Michigan Music Conference, Grand Rapids, MI.
- Nov. 2005 Creating music with technology in the elementary music classroom.  
Farmington School District In-service, Farmington, MI.
- July 2005 General music technology workshop.  
3rd Annual Michigan Music Educators Association Summer Workshop, East Lansing, MI.
- May 2005 Lessons taught and lessons learned: What my students have taught me about teaching music in a tech lab.  
Oakland Intermediate School District, Pontiac, MI.
- Jan. 2005 Creating meaningful technology-infused composition lessons for secondary general music classes.  
Michigan Music Technology Conference, Ann Arbor, MI.

- Oct. 2004 Technologies for middle school general music.  
Bloomfield Hills Middle School, Bloomfield Hills, MI.
- Sept. 2004 Enabling musical creativity with technology: Curricular ideas, strategies, and tools.  
Ottawa Area Intermediate School District, Holland, MI.
- Apr. 2004 The Rite of Spring project: A collaborative middle school curriculum project in music and dance.  
Teaching for Musical Understanding Society, Rochester, MI.
- Notation technologies hands-on workshop.  
East Central Michigan Educational Consortium Workshop  
Lapeer, MI.
- Creative music technologies for the elementary music classroom.  
Rochester Community Schools, Rochester, MI,
- Mar. 2004 Music, technology, and society: What does It mean to be a musician in the 21st Century?  
World Affairs Seminar, Cranbrook Schools, Bloomfield Hills, MI.
- Jan. 2004 Enabling musical creativity with technology: Curricular ideas, strategies, and tools.  
Michigan Music Technology Conference, Ann Arbor, MI.
- Super Duper Music Looper: A hands-on look at what you and your students can create.  
Michigan Music Technology Conference, Ann Arbor, MI.
- Oct. 2003 Using electronic musical instruments in the elementary music classroom.  
Wisconsin Music Educators Association (WMEA) Conference, Madison, WI.
- Oct. 2003 Creating music with technology.  
Wisconsin Music Educators Association (WMEA) Conference, Madison, WI.
- Music technology in the one computer classroom.  
Association of Independent Michigan Schools (AIMS) Conference, Bloomfield Hills, MI.
- New music technologies for elementary general music.  
Rochester Community Schools, Rochester, MI.
- Designing elementary and middle school electronic music labs.  
Kensington Academy, Beverly Hills, MI.

- Aug. 2003 Hands-on music technology overview for instrumental music teachers.  
Troy School District In-service, Troy, MI.
- Hands-on music technology overview for choral/general music teachers.  
Troy School District In-service, Troy, MI.
- Feb. 2003 Tuning the band by ear.  
Presentation with Mike Brown and Robert Myers at the Texas Music Educators Association (TMEA) Annual Conference, San Antonio, TX.
- Jan. 2003 New technologies for the general music classroom.  
Michigan Music Technology Conference, Ann Arbor, MI.
- Oct. 2002 Teaching for musical understanding through technology.  
Monroe ISD In-service Workshop, Monroe, MI.
- Teaching for musical understanding with the MIDIPartner System.  
Presentation with Jackie Wiggins at the Teaching for Musical Understanding Society, Rochester, MI.
- July 2002 Teaching for musical understanding through technology.  
1st Annual Michigan Music Educators Association Summer Workshop, East Lansing, MI.
- Integrating music technology into the general music classroom.  
1st Annual Michigan Music Educators Association Summer Workshop, East Lansing, MI.
- June 2002 Making music with the MIDIPartner System.  
Presentation with Jackie Wiggins at the Scott Foresman/Silver Burdett Summer Music Workshop, Ypsilanti, MI.
- May 2002 Interactive technology for K-12 music classes.  
East China School District, St. Clair, MI.
- Enhancing the general music classroom with a SMARTBoard.  
Michigan Music Technology Conference II, Crystal Falls, MI.
- Making music with technology in the general music classroom.  
Michigan Music Technology Conference II, Crystal Falls, MI.
- Apr. 2002 Software for student musical creativity.  
Grosse Pointe School In-service, Grosse Pointe, MI.

- Jan. 2002 Integrating notation software into music composition projects in middle and high school performance classes.  
L'Anse Creuse School District, Macomb County, MI.
- Interactive technology for the elementary and middle school music classroom.  
Grosse Pointe School District In-service, Grosse Pointe, MI.
- Enhancing the general music classroom with a SMARTBoard.  
Michigan Music Technology Conference, Ann Arbor, MI.
- Jan. 2002 Making music with technology in the general music classroom.  
Michigan Music Technology Conference, Ann Arbor, MI.
- Nov. 2001 Interactive technology for the elementary music classroom.  
Port Huron School District In-service, Port Huron, MI.
- Sept. 2001 Teaching for musical understanding through technology.  
Teaching for Musical Understanding Society Workshop,  
Rochester, MI.
- Aug. 2001 Introduction to music notation software and computer audio techniques.  
Troy School District In-service, Troy, MI.
- May 2001 The MIDIPartner System: A new approach to integrating technology in the general music classroom.  
Electronic Music Festival, Linton, IN.
- Mar. 2001 An overview of music technology possibilities for the general music classroom.  
Lake Orion School District In-service, Lake Orion, MI.
- Mar. 2001 The MIDIPartner System: A new approach to integrating technology in the general music classroom.  
Massachusetts Music Educators Association Conference,  
Danvers, MA.
- The future of music technology in the K-12 music curriculum.  
Massachusetts Music Educators Association Conference,  
Danvers, MA.

- Jan. 2001 New technology for the general music classroom.  
Presentation with Jackie Wiggins at the Michigan Music  
Technology Conference, Ann Arbor, MI.
- Music technology to improve the intonation of high school music  
students.  
Michigan Music Technology Conference, Ann Arbor, MI.
- Apr. 1998 Melding music, art, and interactivity.  
Presentation with Michael Rodemer at the IMMEDIA Digital  
Hybrid Art Show, University of Michigan, Ann Arbor, MI.
- Jan. 1997 Expanding the interactive possibilities of your music technology  
lab with the EZ I/O.  
Presentation with Michael Rodemer at the Michigan Music  
Technology Conference, Ann Arbor, MI.



## SERVICE ACTIVITIES

### Service to New York University

<b>Present</b>	At-Large Member, Steinhardt Faculty Council Member, Steinhardt School Planning Committee Member, Steinhardt Teacher Education Working Group Member, NYU Entrepreneurial Institute, Cross Disciplinary Academic Stewardship Council Member, MPAP Promotion and Tenure Committee Co-Chair - 2015
2015	Chair, MPAP Technology-Enhanced Learning Committee Member, MPAP Development Committee
2014	Member, Music Business Clinical Faculty Search Committee

### Community Activities Related to Professional Field

<b>2014-Present</b>	Member, Board of Directors. Young Composers and Improvisors Workshop. NY, NY. <a href="http://yciw.net/">http://yciw.net/</a> .
<b>2013-Present</b>	Member, Advisory Board, Music First. NY, NY. <a href="http://musicfirst.com/">http://musicfirst.com/</a> .
2013-2017	Member, Board of Directors, Music Interactive Technology, A. S. Bergen, Norway. <a href="http://musit.no/">http://musit.no/</a>
2012-2016	Member, Board of Directors. Music and Youth Initiative. Boston, Massachusetts. <a href="http://musicandyouth.org/">http://musicandyouth.org/</a> .
2009-2015	Member, Educator Advisory Board, Noteflight, LLC. Cambridge, MA. <a href="http://noteflight.com/">http://noteflight.com/</a> .