



SEAMUS

EMOTION AND ELECTROACOUSTIC MUSIC

Society for Electro-Acoustic Music in the United States

30th National Conference
March 26-28, 2015

Virginia Tech
Blacksburg, VA

<http://seamus.music.vt.edu/>

Table of Contents

About SEAMUS / Board of Directors	2
Previous Conferences	3
SEAMUS President's Welcome Page	4
Welcome from Directors of ICAT and SOPA	5
Conference Host's Welcome Page	7
SEAMUS 2015 Conference Map	9
Overview of Events	10
SEAMUS Award Winner page	13
2014 ASCAP/SEAMUS Commission Winners /	
Allen Strange Award Winner	14
Featured Performers	15
Detailed Conference Program	18
Installation Art	63
Listening Rooms	69
Biographies	70
Acknowledgements	112

About SEAMUS

Founded in 1984, The Society for Electro-Acoustic Music in the United States (SEAMUS) is a non-profit national organization of composers, performers, and teachers of electro-acoustic music representing every part of the country and virtually every musical style. Electro-Acoustic music is a term used to describe those musics which are dependent on electronic technology for their creation and/or performance.

SEAMUS is committed to facilitating member interaction and the dissemination of their work through an annual national conference, juried recording projects, and the publication of Journal SEAMUS.

SEAMUS Board of Directors

PRESIDENT	Scott Miller
VICE PRESIDENT FOR PROGRAMS	Keith Kirchoff
VICE PRESIDENT FOR MEMBERSHIPS	Linda Antas
TREASURER	Ryan Carter
SECRETARY	Kyong Mee Choi
MEMBER AT LARGE	Per Boland
DIRECTOR OF CONFERENCES	Keith Kothman
DIRECTOR OF COMMUNICATIONS	Stephen Kemper
EDITOR, SEAMUS JOURNAL	Tae Hong Park
MANAGER OF TECHNOLOGICAL DEVELOPMENT	Adam Vidiksis
DIRECTOR OF SEAMUS RECORDINGS	Scott Wyatt



Previous Conferences

- SEAMUS 2014** March 27-29: Wesleyan University, Middletown, CT
- SEAMUS 2013** April 18-20: McNally Smith College of Music, St. Paul, MN
- SEAMUS 2012** February 9-11: Lawrence University, Appleton, WI
- SEAMUS 2011** January 20-22: Miami University, Coral Gables, FL
- SEAMUS 2010** April 8-10: St. Cloud State University, St. Cloud, MN
- SEAMUS 2009** April 16-18: Sweetwater Sound, Ft. Wayne, IN
- SEAMUS 2008** April 4-7: University of Utah, Salt Lake City, UT
- SEAMUS 2007** March 8-10: Iowa State University of Science and Technology, Ames, IA
- SEAMUS 2006** March 30-April 1: University of Oregon, Eugene, OR
- SEAMUS 2005** April 14-16: Ball State University, Muncie, IN
- SEAMUS 2004** March 25-27: San Diego State University, San Diego, CA
- SEAMUS 2003** March 13-15: Arizona State University, Tempe, AZ
- SEAMUS 2002** April 4-6: University of Iowa, Iowa City, IA.
- SEAMUS 2001** March 1-3: Louisiana State University, Baton Rouge, LA
- SEAMUS 2000** March 9-11: University of North Texas, Denton, Texas
- SEAMUS 1999** March 26-28: San Jose State University, San Jose
- SEAMUS 1998** April 16-18: Dartmouth College, Hanover, NH
- SEAMUS 1997** April 3-5: University of Missouri, Kansas City, MO
- SEAMUS 1996** April 18-20: Birmingham-Southern College, Birmingham, AL
- SEAMUS 1995** Ithaca College, Ithaca, NY
- SEAMUS 1994** Middlebury College, Middlebury, VT
- SEAMUS 1993** University of Texas, Austin, TX
- SEAMUS 1991** University of Illinois, Urbana, IL
- SEAMUS 1990** Louisiana State University, Baton Rouge, LA
- SEAMUS 1989** New York University and New Music America, New York, NY
- SEAMUS 1988** Evergreen State College, Olympia, WA
- SEAMUS 1997** Dartmouth College, Hanover, NH
- SEAMUS 1995** California Institute for the Arts, Valencia, CA

Welcome to SEAMUS 2015



On behalf of the Board of Directors, I welcome you to SEAMUS 2015 and Virginia Tech in Blacksburg, Virginia! I want to thank our conference hosts, Ivica Ico Bukvic, Eric Lyon, and Charles Nichols, and also their entire team, for the endless hours, days, and months of preparations that have gone into making this conference possible. I know that we will all enjoy three days of fantastic music, presentations, and social activities.

This year we honor Dave Smith, our recipient of the 2015 SEAMUS Award. He will add this to other distinguished awards, including a Grammy and being named a Fellow of the Audio Engineering Society (AES). Mr. Smith is perhaps most widely known in SEAMUS as the "Father of MIDI." Conceiving of and helping design the Musical Instrument Digital Interface protocol is certainly a highlight of his career as a designer of analog and digital instruments. But his other accomplishments in the field are equally notable, including the founding of Sequential Circuits, developing the first programmable polyphonic synthesizer, leading the R&D divisions for Yamaha and Korg, and developing the first software synthesizer for personal computers. In some way, we've all benefited from Mr. Smith's work in the field of music, and I am thrilled that we will honor him for his achievements this weekend.

Finally, I would like to extend my sincerest gratitude to the SEAMUS Board of Directors: Linda Antas, Per Bloland, Ryan Carter, Kyong Mee Choi, Anthony Cornicello, Steve Kemper, Keith Kirchoff, Tae Hong Park, Adam Vidiksis, and Scott Wyatt. It is their energy and dedication that keeps our organization operating and responsive to the needs of our members. It is important that we recognize them for all of their work this past year and for all the work that awaits them in the year ahead.

SEAMUS' mission to promote the creation and presentation of electro-acoustic music in the U.S. is as important as ever. Please share with me and with Board members your ideas for how we can continue to improve SEAMUS and best serve the membership.

Cordially,

Scott L. Miller
President



Welcome to SEAMUS 2015



Dear Friends:

I welcome each of you to this exciting conference on our beautiful campus. The conference title "Emotion and Electroacoustic Music" suggests music that connects us to one another and redefines the boundaries of electronic and acoustic music. This conference, which explores new dimensions of human expression, is a welcome presence in our community!

We all know that music teaches all kinds of hidden things — like math and language processing skills, spatial perception, creative thinking and problem solving, compassion and empathy, craftsmanship and attention to detail, the ability to listen, a sense of responsibility, the value of sustained effort, cooperation, self-expression, and courage. So certainly SEAMUS is made up of some remarkable human beings! And we recognize you as part of our own tribe! The identity statement of the School of Performing Arts | Music | Theatre | Cinema reads:

We are artists teaching artists.
We celebrate tradition and explore new directions.
We study, collaborate, and create.
We connect.

Our faculty and students work together on projects that integrate appropriate uses of advanced technologies. We support scholarship and innovation that transcend the boundaries of existing forms.

Virginia Tech is grateful to the tremendous faculty members, staff, and student workers who have brought this conference to fruition. I particularly want to thank Ico Bukvic, Eric Lyon, and Charles Nichols who have dedicated a piece of their lives to making this happen. They are three of the excellent scholars, musicians and innovators on our faculty who are pushing the boundaries of artistic work.

The university's slogan is "Invent the Future" and its motto is "Ut Prosim" (That I May Serve). The music faculty of the School of Performing Arts is inventing the future of the performing arts and we are happy to be of service to you -- our artistic tribe.

We hope this is the conference of a lifetime. I wish you great joy as you share your ideas, your artistry, and explore our community!

All the best,

Patty Raun, Director
School of Performing Arts
Music | Theatre | Cinema



Welcome to SEAMUS 2015



It is my great pleasure to welcome you to SEAMUS 2015 for an immersive celebration of recent research and practice in electro-acoustic music. The embrace of the arts and technology has grown increasingly rich and deep with the ongoing maturation of digital technologies. At the Institute for Creativity, Arts, and Technology (ICAT), we foster the technological and artistic exploration and innovations that are yet to come, at the intersection of these two most powerful human endeavors. Aesthetic research is as important to us as the technological and scientific research that is also conducted here. Therefore it is fitting that SEAMUS be the first national conference hosted by ICAT, in collaboration with the School of Performing Arts at Virginia Tech.

SEAMUS has for 30 years explored the boundaries of electro-acoustic music, offering a rare framework for the concentrated presentation of the latest music composed in this advanced artistic domain. Over these three decades, much has changed in the technology with which electro-acoustic music is created. First, the technology has become more accessible and ubiquitous to music creators around the world, and second, the practice of electro-acoustic music has become increasingly embedded in mass cultural platforms such as movies, television, and the web. For advanced practitioners of electro-acoustic music, new areas remain to be explored, using increasingly powerful technologies.

The theme of SEAMUS 2015, "Emotion and Electro-acoustic Music" focuses on one such area. While emotion in the sense of subjective affect has always been of interest to musicians, in electro-acoustic music emotion is often overshadowed by a theoretical focus on more technical elements, as is often the case for traditional music theory. Today however, we can explore emotion as much through measurement of physiological indicators as through subjective aesthetic research, suggesting a broad field for future investigation in electro-acoustic music.

Of course a much broader range of aesthetic and research questions will be considered at SEAMUS in this short, but intensive few days, which we hope will provide enough musical inspiration for an entire year. Seamus is happening at Virginia Tech due to the hard work of an incredible team of ICAT faculty fellows, Ico Bukvic, Eric Lyon, and Charles Nichols. Each one of them a perfect exemplar of dedication to their transdisciplinary craft: composer, performer, and expert technologist. I would like to extend my gratitude and appreciation for their tireless work to make this happen.

It is also my privilege to welcome each one of you to share your ideas and music with us, and with each other.

Thank you.

R. Benjamin Knapp, Director
Institute for Creativity, Arts, and Technology (ICAT)



Welcome to SEAMUS 2015



It is with great pleasure that we welcome you to Virginia Tech and Blacksburg, Virginia, home of the 2015 Society for Electro-Acoustic Music in the United States (SEAMUS) national conference. It has been over thirty years since the inception of this important national organization, designed to push the boundaries of electroacoustic music and with it our culture and technology, and we are thrilled to have been chosen as the site for this year's conference.

The conference theme is "Emotion and Electroacoustic Music." Emotion is intrinsic to human perception of music, and the electroacoustic genre is no exception. Yet, its study within the electroacoustic genre remains conspicuously underrepresented. This year we have worked to produce a holistic experience that explores emotion and emotional impact through electroacoustic music. As a result, our program offers opportunities for meditation and contemplative practice, immersion, networking and discussion, listening rooms with audio-visual content, six thematically focused paper sessions, and fourteen concerts in cutting-edge venues, including the new Moss Arts Center with its 1,260-seat Fife Theatre and the state of the art Institute for Creativity, Arts, and Technology Cube, offering a unique hybrid 145-speaker system. We are particularly proud to co-host an electroacoustic concert designed specifically for children, that has attracted over 800 students from regional public and private schools. This exciting event was made possible through a close collaboration with the new Moss Arts Center and its incredibly talented staff. As is the case every year, we also look forward to sharing with you the President's reception and a banquet—both have been designed to cater to most if not all dietary needs, and we sincerely hope you will enjoy the culinary diversity southwestern Virginia has to offer.

For us, this conference is not only a wonderful opportunity to host and showcase top electroacoustic scholars and artists in the country, but also is a critical milestone in a decade-long journey. It all began in 2006, with the introduction of the Collaborative for Creative Technologies in the Arts and Design, a Provost-led visionary transdisciplinary initiative that in many ways served as the foundation for the Virginia Tech Arts Initiative, and led the way for the groundbreaking new Moss Arts Center and the Institute for Creativity, Arts, and Technology. What started as a seemingly modest operation in a makeshift classroom soon grew into a Digital Interactive Sound and Intermedia Studio (DISIS), with a uniquely transdisciplinary curriculum. In 2009, DISIS became the home of the world's first Linux Laptop Orchestra (L2Ork), attracting twenty stakeholders across campus and a half-dozen corporate sponsors. With its focus on affordable infrastructure, L2Ork soon became the hub for K-12 educational outreach, spawning over a half dozen similar initiatives across North and South Americas, and winning a number of awards. Last Fall L2Ork was named one of the top eight research projects of Virginia



Tech. In 2013, we witnessed the opening of the monumental \$100M Moss Arts Center, and with it the new home of the Institute for Creativity, Arts, and Technology. Most recently, as of January 2015, we completed a transition to a new and permanent DISIS in the Newman Library, a \$600,000 project, effectively quadrupling available space and infrastructure. Today, Virginia Tech scholars and students enjoy access to the new DISIS, ICAT's cutting-edge Cube, the Sandbox, Create, Perform, Experience, and Learning studios, the Moss Arts Center's Fife Theatre, as well as an impressive collection of preexisting performance spaces within the School of Performing Arts.

We are also pleased to host this year's SEAMUS award winner, Dave Smith, who was selected for this prestigious award because of his seminal work with a broad array of music technologies, including, among others, the first polyphonic and microprocessor-controlled synthesizer. Known also as the "Father of MIDI", Smith has in many ways played a critical role in shaping the last thirty years of electroacoustic music and beyond. We are truly honored by his presence and very much look forward to his keynote.

SEAMUS 2015 would not have been possible without the selfless efforts and generous contributions from many supportive colleagues, students, and stakeholders. Our conference is sponsored by more than dozen internal stakeholders, including the School of Performing Arts, Institute for Creativity, Arts, and Technology, Virginia Tech Office of the Provost, College of Liberal Arts & Human Sciences, Institute for Critical Technology and Applied Science, Center for Human-Computer Interaction, Graduate School, College of Engineering, Office of the Vice President for Information Technology, Department of Computer Science, Technology-Enhanced Learning and Online Strategies, University Libraries, and the Institute for Society, Culture and Environment. Notably, we would like to acknowledge School of Performing Arts Director Patricia Raun, Institute for Creativity, Arts, and Technology Director Benjamin Knapp, and Vice Provost for the Arts Ruth Waalkes. Likewise, we would like to thank our external sponsors, Sweetwater Inc. and Rock the Blocks, a regional arts festival that will take place concurrently with our conference, offering even more opportunities for our guests to experience regional arts and culture. We would like to thank our incredibly supportive friends and colleagues, professional staff, student workers and volunteers, as well as our own families, without whom we would've never found the time nor strength to make this conference a reality.

Lastly and most importantly, this conference could not have been possible without your presence and your creative contributions to the field of electroacoustic music, and for that we cannot thank you enough. We are thrilled by the interest the conference has generated. With over 160 registrants, the SEAMUS community is showing healthy growth. Likewise, the quality of submissions this year has exceeded all expectations, warranting six thematically co-located paper sessions, and an amazing selection of music and installations.

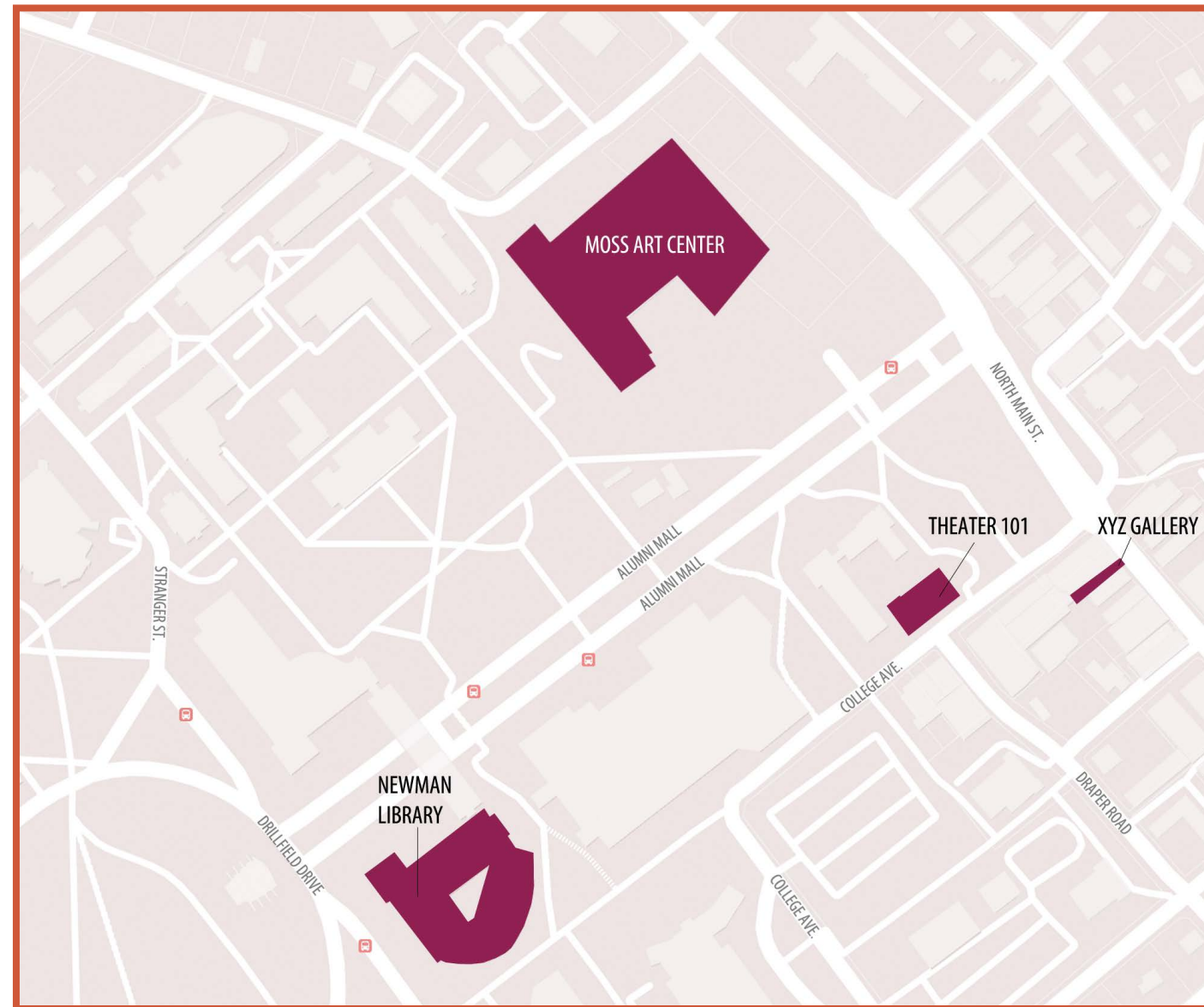
We welcome you to Blacksburg, and look forward to sharing with you an amazing conference. If there is anything that we can do to make your stay more enjoyable, and your experience more engaging, please do not hesitate to ask. Let SEAMUS 2015 begin!

Ivica Ico Bukvic
Eric Lyon
Charles Nichols

SEAMUS 2015 Conference Hosts



SEAMUS 2015 Conference Map



SEAMUS 2015 Overview of Events

March 25, 2015

Crash Ensemble

7:30 PM, Anne and Ellen Fife Theatre, Moss Arts Center

March 26, 2015

Meditation

8:00 AM - 9:00 AM: Learning Studio, Moss Arts Center

Listening Rooms

9:00 AM - 5:00 PM: DISIS Lab, Newman Library; Perform Studio, Moss Arts Center

Installations

9:00 AM - 5:00 PM: Cube Hallway, Fife Mezzanine Lobby, Fife Balcony Lobby, Moss Arts Center; XYZ Gallery

Paper Session 1: Electroacoustic Music Mediation

9:30 AM - 10:30 AM: Multipurpose Room, Newman Library

Concert 1

11:00 AM - 12:00 PM: Cube, Moss Arts Center

Concert 2

1:00 PM - 2:00 PM: Anne and Ellen Fife Theatre, Moss Arts Center

Paper Session 2: Robots and Ensembles

2:30 PM - 3:30 PM: Multipurpose Room, Newman Library

Concert 3

4:00 PM - 5:00 PM: Cube, Moss Arts Center

President's Reception

5:00 PM - 6:00 PM: Grand Lobby, Moss Arts Center



Concert 4

7:00 PM - 9:00 PM: Anne and Ellen Fife Theatre, Moss Arts Center

Concert 5

10:00 PM - 11:30 PM: Theatre 101

March 27, 2015

Meditation

8:00 AM - 9:00 AM: Learning Studio, Moss Arts Center

Listening Rooms

9:00 AM - 5:00 PM: DISIS Lab, Newman Library; Perform Studio, Moss Arts Center

Installations

9:00 AM - 5:00 PM: Cube Hallway, Fife Mezzanine Lobby, Fife Balcony Lobby, Moss Arts Center; XYZ Gallery

Paper Session 3: New Tools and Technologies

9:30 AM - 10:30 AM: Multipurpose Room, Newman Library

Concert 6

10:30 AM - 11:30 AM: Anne and Ellen Fife Theatre, Moss Arts Center

Concert 7

1:00 PM - 2:00 PM: Cube, Moss Arts Center

Paper Session 4: Workshops

2:30 PM - 4:30 PM: Multipurpose Room, Newman Library

Banquet

5:00 PM - 7:00 PM: The Inn at Virginia Tech

Concert 8

7:30 PM - 9:30 PM: Anne and Ellen Fife Theatre, Moss Arts Center

Concert 9

10:00 PM - 11:30 PM: Theatre 101



March 28, 2015

Meditation

8:00 AM - 9:00 AM: Learning Studio, Moss Arts Center

Listening Rooms

9:00 AM - 5:00 PM: DISIS Lab, Newman Library; Perform Studio, Moss Arts Center

Installations

9:00 AM - 5:00 PM: Cube Hallway, Fife Mezzanine Lobby, Fife Balcony Lobby, Moss Arts Center; XYZ Gallery

Paper Session 5: New Approaches to Composition and Performance

9:30 AM - 10:30 AM: Multipurpose Room, Newman Library

Concert 10

11:00 AM - 12:00 PM: Cube, Moss Arts Center

Concert 11

1:00 PM - 2:00 PM: Anne and Ellen Fife Theatre, Moss Arts Center

Paper Session 6: Music Today

2:30 PM - 3:30 PM: Multipurpose Room, Newman Library

Concert 12

4:00 PM - 5:00 PM: Cube, Moss Arts Center

SEAMUS Meeting

5:00 PM - 6:00 PM: Cube, Moss Arts Center

ICAT Facilities Tour

6:00 PM - 7:00 PM: ICAT, Moss Arts Center

Concert 13

7:00 PM - 9:00 PM: Anne and Ellen Fife Theatre, Moss Arts Center

Concert 14

10:00 PM - 11:30 PM: Theatre 101



Winner of the 2015 SEAMUS Award Dave Smith



Instrument designer and Grammy-winner Dave Smith founded Sequential Circuits in the early 70s. In 1977, he designed the Prophet-5, the first polyphonic and fully programmable synthesizer, also the first musical instrument with an embedded microprocessor. Over the following 10 years he developed many new synths and drum machines with Sequential.

Dave is generally known as the driving force behind the generation of the MIDI specification in 1981—in fact, he coined the acronym. In 1987 he was named a Fellow of the Audio Engineering Society (AES) for his continuing work in the area of music synthesis. After Sequential, Dave was President of DSD, Inc, an R&D division of Yamaha, where he worked on physical modeling synthesis and software synthesizer concepts. He then started the Korg R&D group in California, producing the Wavestation products and other technology.

He took over as President at Seer Systems and developed the first software synth for Intel in 1994, followed by the first fully professional soft synth, Reality, released in 1997.

Realizing the limitations of software, Dave returned to hardware and started Dave Smith Instruments which released the Evolver hybrid analog/digital synthesizer in 2002. Since then the DSI product lineup has grown to include the Prophet 12, Prophet '08, Pro 2, Mopho, and Tetra synths, as well as the Tempest drum machine, co-designed with friend and fellow electronic instrument designer Roger Linn.



2015 ASCAP/SEAMUS Adjudicators

Lou Bunk
Marianne Gythfeldt
Joo Won Park
Paul Schuette
Rick Snow
Dan VanHassel

2015 ASCAP/SEAMUS Student Commission Competition finalists

Thomas Beverly
Ocotillo, for multi-percussion, seasonally variable electronics, and video

Jason Charney
Foreign Masonry, for baritone saxophone and live electronics

Shih-Wei Lo
Things Hoped For, *Things Unseen*, for amplified harp, electronic music, and projected video

Justin Porter
Catapult, for alto saxophone and interactive electronics

2015 Allen Strange Memorial Award Winner

Mitch Weakley
Nexus, for electronic music

Performers Featured in the SEAMUS 2015 Conference

Annie Stevens

Annie Stevens is the Visiting Assistant Professor of Percussion at Virginia Tech where she teaches studio percussion and directs the Virginia Tech Percussion Ensemble. As a chamber musician and soloist, Stevens has performed internationally at music conservatories in Beijing, Guangzhou, and Xi'an, China, the Paris Conservatory, The University of Huddersfield, England, and she has toured throughout Germany as principal timpanist with the Detmold Chamber Orchestra of Germany. Nationally, she has performed with New York's Ensemble Signal at the Eastman School of Music, and with the Grammy nominated Metropolis Ensemble on several occasions. Stevens has been featured at the Percussive Arts Society International Convention, the Virginia Music Educators Association annual conference, the International Computer Music Conference, the International Trumpet Guild, and the International Trombone Festival. She has commissioned several new works including the electroacoustic piece, *Robot*, for violin and percussion by Christopher Cook. She earned a D.M.A. degree from the Eastman School of Music where she studied percussion with the internationally acclaimed soloist, Michael Burritt. Her other teachers include Alan Abel, Philadelphia Orchestra Emeritus; Chip Ross, principal timpanist of the Rochester Philharmonic Orchestra; and Bill Cahn, Nexus Percussion Ensemble. Annie proudly endorses Malletech instruments.



Jay Crone

Jay Crone, professor of music, joined the Virginia Tech faculty in 1994. Mr. Crone has performed with many symphony orchestras and bands throughout the United States, including the Roanoke (VA) Symphony Orchestra and the Fresno (CA) Philharmonic Orchestra. He is currently the Principal Trombone of the Roanoke Symphony Orchestra, Opera Roanoke, and the Wintergreen Festival Orchestra, the orchestra in residence at the Wintergreen Performing Arts Festival. He also performs with the Shenandoah Valley Bach Festival Orchestra in Harrisonburg, Virginia. As a soloist and chamber musician, Crone has appeared in the United Kingdom, China, and Ecuador, in addition to many performances as trombone and euphonium soloist with bands from Virginia and California. He is a regular chamber music performer, and has been featured at many conferences and festivals, including the Eastern Trombone Workshop, Southeast Regional Horn Workshop, Wintergreen Performing Arts Festival, and the Shenandoah Valley Bach Festival. In addition, Crone has performed as a trombone and euphonium soloist and collaborative pianist in recitals in Virginia, California, and throughout the southeastern United States.



Phillip Paglialonga

Phillip O. Paglialonga currently serves on the faculty of Virginia Tech in Blacksburg, Virginia. He did his undergraduate study at DePaul University as a student of Larry Combs and earned a masters and a doctorate from the University of Michigan as a student of Fred Ormand and Daniel Gilbert. He has held positions with the Sarasota Opera Orchestra, Haddonfield Symphony and Walt Disney World Orchestra. He has appeared with numerous orchestras including the Sarasota Orchestra, Florida Orchestra, Orlando Philharmonic, Fort Wayne Philharmonic, Kalamazoo Symphony, Windsor Symphony in Ontario, and Charleston Symphony. He has also performed at several summer festivals including the National Repertory Orchestra, the Music Academy of the West, and Lake George Opera. He is a founding member of the PEN Trio (www.PENtrio.com), which regularly tours throughout the United States and is represented by Price Rubin & Partners. In the summer months Dr. Paglialonga is on the faculty at Blue Lake Fine Arts Camp in Michigan where he performs with the Festival Orchestra. Dr. Paglialonga has authored several articles for the Clarinet, Keynotes Magazine, School Band & Orchestra and the Journal of the National Association of College Wind and Percussion Instructors which are available on his website (www.thefirstgissilent.com). Dr. Paglialonga recently completed work on a new book, *Squeak Big: Practical Fundamentals for the Successful Clarinetist* that will be published by Imagine Music Publishing and available worldwide in 2015. Dr. Paglialonga is a Gonzalez artist and performs exclusively on Gonzalez GD reeds.



Tracy Cowden

Tracy Cowden, associate professor of piano and vocal coach at Virginia Tech, has appeared as soloist with the Roanoke Symphony Orchestra, the Chamber Orchestra of Southwest Virginia, and the Central Ohio Symphony Orchestra. As a collaborative pianist, Cowden has recently performed with the Chicago Symphony Orchestra's principal flutist Mathieu Dufour, tenor Vinson Cole, and soprano Elizabeth Futral as well as performances at the 2014 National Flute Association Conference, the 2012 College Music Society National Conference and at the 2012 International Trumpet Guild. Cowden is the chair of the music program in the School of Performing Arts at Virginia Tech, where she has been honored for her work as a teacher with a Certificate of Teaching Excellence. Also active as a clinician and lecturer, she has presented master classes and workshops on topics related to collaborative music-making and creative programming across the country. A passionate advocate for new music, Cowden has premiered many new chamber works as soloist and with colleagues around the country, and most recently in Thailand. Recent projects include the commissioning of the song cycle *Vegetable Verselets* from composer Daron Aric Hagen, and *Confronting Inertia*, a recording of new works for trumpet and piano with John Adler, released by Origin Classical. She was honored with the Albert L. Sturm Award for Excellence in the Creative Arts in 2014. Cowden holds degrees from the Eastman School of Music and Western Michigan University.

Ariana Wyatt

Ariana Wyatt's recent opera engagements include appearances with Gotham Chamber Opera, Opera on the James, Opera Omaha, Opera Roanoke, Glimmerglass Opera, Florida Grand Opera, Santa Fe Opera, the Juilliard Opera Center, and the Aspen Opera Theater. In concert Ms. Wyatt has performed the Messiah with Charleston Symphony, Vivadi's *Gloria* at Carnegie Hall, Mozart's *Requiem* and Haydn's *Creation* for Davidson College, the Brahms *Requiem* in Bulgaria, and Bach's b minor mass in Spain. Ms. Wyatt is a graduate of the Juilliard Opera Center and the University of Southern California where she was recognized as the Outstanding Graduate of the class of 2001. Ms. Wyatt won the Metropolitan Opera National Council Auditions Western Region, the Pasadena Opera, and the New West Symphony Competitions and been a finalist in the Charles A. Lyman Competition. She is currently an assistant professor of voice at Virginia Tech.



Alex Fowler

Alexander Fowler has been playing the cello as an orchestra member, a chamber musician, and soloist for over a decade. He has held positions with the American Youth Philharmonic Orchestra, the Brevard Music Center Orchestra, and the Virginia All State Orchestra, where he was assistant principal. His studies in chamber music have taken him to various festivals as far as New Mexico and Arcidosso, Tuscany in Italy. In their cello and bass duo, Low String Theory, Alexander and bassist Jacob Courington are avid performers of contemporary music, their most recent performances including movements from Donald Erb's *Four Timbre Pieces*. In master classes Alexander has performed for some of the world's top performers and pedagogues, including Zuill Bailey, Emmanuelle Bertrand, and David Finckel. Alexander is also an active teacher, working with such organizations as the Virginia Tech String Project and the Jefferson Center Music Lab in Roanoke, VA, which strive to bring string and music education to students and schools throughout the New River Valley.

Detailed Conference Program

March 25, 2015

Crash Ensemble

7:30 PM, Anne and Ellen Fife Theatre, Moss Arts Center

In this pre-SEAMUS concert, Ireland's foremost contemporary music ensemble presents new works for ensemble and electronics, featuring works by Donnacha Dennehy, Michael Gordon, Eric Lyon, and Dan Trueman.

March 26, 2015

Meditation

8:00 AM - 9:00 AM, Learning Studio, Moss Arts Center

This year's conference will feature three morning meditations. Each session will focus on one of the elements of contemplative practice, including guided sitting meditation and moving practices. The meditations will be guided by Drs. Matthew Komelski and Jordan Hill.

Dr. Matthew Komelski has been involved in the martial arts for more than 30 years, with blackbelt ranks in Chinese, Japanese, and Korean Arts. For the last twenty years his practice has focused increasingly on the Chinese internal arts, including Xinyi, Chen style Taijiquan and more recently Hunyuan Taijiquan. Following the work and teachings of Dr. Yang, Dr. Komelski offers a range of Taiji practices through his programs, including seated, standing, and lying down meditation, qigong movement, and Taiji choreography, as well as partner training and self-defense.

Dr. Jordan Hill studied broadly in mindfulness practices at Naropa University, is certified as a mindfulness instructor, and has completed a month-long Dathun meditation retreat in the practice lineage of Chogyam Trungpa. For the past six years, Dr. Hill has worked to help develop the contemplative community at Virginia Tech and across southwest Virginia. His style of mindfulness practice incorporates body work, sitting practice and a range of moving practices. His morning practices sessions will help participants center themselves both personally and collectively in the aspiration of fostering creativity and collaboration at the conference.

Listening Rooms

9:00 AM - 5:00 PM: DISIS Lab, Newman Library; Perform Studio, Moss Arts Center

Installations

9:00 AM - 5:00 PM: Cube Hallway, Fife Mezzanine Lobby, Fife Balcony Lobby, Moss Arts Center; XYZ Gallery



Paper Session 1: Electroacoustic Music Mediation

9:30 AM - 10:30 AM, Multipurpose Room, Newman Library

Sonic Ecosystems; Current Work and Integration with the 'Internet of Things' - Michael Musick

This lecture will present the Michael Musick's work in his Sonic Spaces Project. This project is comprised of a number of 'sonic ecosystems' – interactive performance systems. These systems allow participants to the space to explore open-form, spatio-temporal compositions, in which every sonic aspect of the system (including the physical room, and human participants) is interconnected. The implications of this change in musical composition practice will be discussed, as well as the compositional techniques used during the development of these systems. More importantly though, the author will discuss the inspiration for this project and the shared themes and ideas with natural soundscapes that these pieces embody. Popular songs play a central role in the emotional life of global culture. Songs are a part of our collective consciousness, are fused with our memories, and are embedded in our technologies. For example, the songs "Tom's Diner" and "Fast Car" were used to test and develop the MP3 format, and thus, in a sense, all songs encoded as MP3's owe a part of their sound to this cultural legacy.

Based on models of human audio-visual perception, lossy compression codecs significantly reduce file sizes by removing information deemed perceptually unavailable to the end user. When encoding material in such a format, information from the original signal is deleted. We accept this because the end result is sufficient for our uses, but what does the information which these codecs delete sound and look like? How does this material relate to our memories of the original songs and the emotions these songs invoke? In the work presented here, I develop and employ techniques to recover these lost sounds and images and reformulate them as art.

In particular, *moDernisT* was created by salvaging the audio lost to mp3 compression from the song "Tom's Diner". Here we find the form of the song intact, but the details are fragile remnants of the original, playing at the border of intelligibility, memory, and affect. Similarly, the accompanying video contains only material which was erased during mp4 compression. Finally, the author will discuss the evolving "Internet of Things", focusing on the opportunities and issues that will arise with regards to the Sonic Spaces Project, our relationship to natural soundscapes and related mobile computing technologies

Weblogmusic: Taking the Mediatized Stage - Jeff Morris

While modern citizens are busy keeping up with communications technology, they are missing out on many human elements in communication like presence and authenticity. There is value for artists in exploring the expressive potential of liveness as a unique dimension in a performance. Aesthetic concepts are established to show what is lost when a performance is mediated, what it gains from the of mediatization, and how mediated, once-live events can establish a new kind of authenticity within a performance, even if their authenticity is lost. A number of web-based mediated performances are analyzed to demonstrate the nature of creating performances for mediatized environments. Weblogmusic (<http://weblogmusic.org>) is a new web-based platform for born-digital improvising ensembles, using the asynchronous and episodic but still conversational structure of a weblog ("blog") to shape the performance process. The project contains a number of mixes, each of which is a unique performance realized in a web browser window. Each performance functions both as a live performance and as a pedagogical tool for improvisation, as the viewer is welcome to play along with the improvising ensemble.



Bone Conduction Click Track Monitoring in Live Performance - Robin Cox

This presentation will demonstrate bone conduction as a medium of transmission, and design of an associated click track, for audio monitoring in live performance.

Performers often resist use of click tracks on stage for the sonic compromises caused when earphones cover one or both ears, especially for those with instruments close to the head. It is disorienting, particularly for tuning, to diminish the capacities to hear one's instrument. Bone conduction headphone devices allow a high quality audio signal to be received without covering the ear itself, therefore no diminishment of surrounding ambient sound occurs.

When a well-considered click track of appropriately nuanced volume levels, relative pitch levels, and metrical information is married to bone conduction transmission the potential exists for execution of musical concepts and precisions otherwise going unrealized by more traditional means of stage production. Beyond obvious uses in synchronization to playback tracks, video, or other realms involving electronic mediums, this more advantageous means of receiving click sound (or other audio signals) allows musicians to more fully concentrate on higher order aspects of music-making. Bone conduction transmission also lessens the potential of a click bleeding into nearby microphones, especially in low decibel situations.

Concert 1

11:00 AM -12:00 PM, Cube, Moss Arts Center

Car Parts and Barking Emu.....	Andrew Cole
Putt'n Around.....	Jason Bolte
Harvest Kitchen IIA.....	Christopher Bailey
Butoh Music.....	Jaeseong You and Hyeonhee Park
Transmogrified Strings.....	Edgar Berdahl
	Edgar Berdahl (force-feedback faders)
Hennecker's Ditch Fantasy.....	Bruce Hamilton
Between.....	Ivica Ico Bukvic, Brock Allen (saxophone), L2Ork

Performers

Frehiwot Amente	Deborah Goldeen	Erin Maines
Cody Cahoon	Brandon Hale	Matthew Razaire
Tianyu Ge	Stuart Hupp	Jocelyn Roman
Rachel Gertler	Christian Kurmel	Jacob Stenzel

Ivica Ico Bukvic, Director
Charles Nichols, Co-Director
Nicholas Rich, Visiting Assistant Director

Car Parts and Barking Emu - Andrew Cole

Car Parts and Barking Emu is the second half of *Sanctuary to Sea*, an extended 8-channel fixed media composition. The first half, also titled *Sanctuary to Sea*, was performed at the 2014 SEAMUS. The work follows a series of trails in Wellington, New Zealand and this half starts at my flat at top of the Aro Valley and ends at the Red Rocks, a section of coastline on the Cook Strait. This half of the composition pays homage to Luc Ferrari.



It explores how urban sounds encroach on nature while moving between recognizable and abstract sound worlds. I lived in Wellington for a year on a Fulbright fellowship and came to love the city. I was constantly amazed by the city's sonic richness and the number and variety of bird calls, often sounding in chorus across roads and even valleys. This work is quite nostalgic for me and was written as a way of briefly reliving my experience.

Putt'n Around - Jason Bolte

Putt'n Around was composed in response to my friend, David McIntire's Putney Project. The work uses material derived from David's early exposure to the EMS VCS-3, also known as the "Putney."

Harvest Kitchen 11A - Christopher Bailey

The title of the work refers to the Harvestworks media center in New York City; I am grateful for a residency there that enabled the realization of Part I this composition. It also refers obliquely to a messy ex-housemate of mine, in whose house many of the sounds in this work were recorded.

Butoh Music - Jaeseong You and Hyeonhee Park

Butoh is a form of Japanese modern dance theatre, often executed with slow hyper-controlled motion. *Butoh music*, composed by Hyeonhee Park and Jaeseong You (in alphabetical order), is both musical interpretation of Butoh as well as a dance piece to actually accompany Butoh dance. Beats and pulses come and go, interlocking with one another to form combinations of overlaying textures. As initially well-controlled pulses subtly disintegrate, the resulting disjunctions between the layers create spasmodic stops and glitches, which, in turn, create musical momenta and sound materials for a new set of pulses in the subsequent passage.

Transmogrified Strings - Edgar Berdahl

Haptic force-feedback devices can provide a physical and tangible connection to real-time interactive digital music, yet questions remain about how to employ these devices to support new music performance. *Transmogrified Strings* marks the first compositional foray in the context of haptic plucked strings. For the composition, a series of virtual plucked string instruments were designed and made tangible via eight custom force-feedback faders.

Oxford Dictionaries defines transmogrify as "transform, especially in a surprising or magical manner," which is the core concept of *Transmogrified Strings*. It aims to surprise the listener with sounds that are both new yet uncannily familiar. In each section, virtual plucked string instruments are transformed via a unique operation. For example, strings can be tuned as low as 0.5Hz or as high as the upper bounds of human hearing. The virtual strings retain their tangible character even as the sound changes drastically, and the feel of the instruments changes too, which in turn affects the performer's interaction with the strings. The composition is organized into five sections, each of which is punctuated by the strumming of a zither. As the strings are transmogrified differently in each section, they are specifically solemnified, demystified, vivified, solidified, and declassified.

Hennecker's Ditch Fantasy - Bruce Hamilton

Hennecker's Ditch Fantasy is an acousmatic text-sound composition based on a poem by Katharine Kilalea. All sounds in the piece originate from a recording of Kilalea reading her poem "Hennecker's Ditch" in public.



My work is not a setting of the poem, or a depiction of events and images in the text, but is rather a psychological reaction to Kilalea's poem and an exploration of a sound world.

Voice, a cough, and ambient noise (including recording hiss) each play integral roles, but it's the sound gestures within the poetry that help form recurring musical motives, albeit often highly processed. Some of the poem's words are intelligible but they are often rearranged and multilayered.

Kilalea speaks of writing this poem over the course of an anxiety-ridden year, and the ways in which she attempted to convey emotions indirectly rather than describing them. In contrast, my "Fantasy" was produced in a three-day immersion and is my own gut response to the poem, abstract and similarly indirect. The piece features shifting moods and tonalities as it plays with contrasting degrees of clarity, frequency and space.

Special thanks to Kate Kilalea for allowing me to use her wonderful poetry and her recording.! "Hennecker's Ditch Fantasy" was written for Jude Cowan Montague's "The News Agents" radio program on Resonance FM (London).

Between (2013, Revised 2014) for Saxophone and L2Ork - Ivica Ico Bukvic

Between explores the next logical step in Linux Laptop Orchestra's (L2Ork) evolution. It aims to merge traditional, pop, jazz, and the unusual into a new stylistic trajectory. Originally commissioned by Temple University's Vice-Provost for the Arts and devised in collaboration with dancer and choreographer Jillian Harris, the composition has since seen several iterations, most recently involving L2Ork and saxophone. SEAMUS 2015 iteration continues to build on this tradition, capitalizing on unique opportunities made possible by the newfound ICAT Cube, including experimental spatialization of L2Orkists, a new Google Glass-based conductor interface, and a two-minute immersive introduction leveraging Cube's high density speaker array.



Concert 2

1:00 PM - 2:00 PM, Anne and Ellen Fife Theatre, Moss Arts Center

The Rush of the Brook Stills the Mind.....	Elainie Lillios
Scott Deal (percussion)	
The Ra Expeditions.....	Stephen Smith
Every Problem is a Nail.....	Scott Miller
Keith Kirchoff (piano)	
Foreign Masonry.....	Jason Charney
Matt Younglove (saxophone)	
Gagarin.....	Daniel Eichenbaum
Philip Paglialonga (clarinet)	
Flute Code.....	Matthew Burtner
Lisa Cella (flute)	
Taheen.....	Nicholas Elert
Elijan Smith (double bass)	
Rain in Summer.....	Zachariah Zubow
Megan Karls (violin)	
Stephanie Willow Patterson (bassoon)	
Megan Gray (viola)	

The Rush of the Brook Stills the Mind - Elainie Lillios

The Rush of the Brook Stills the Mind takes its inspiration from a poem with the same title by Wally Swist. The percussionist's virtuosic foray through Swist's evocative work pairs acoustic and electroacoustic forces into a single entity. *The Rush of the Brook Stills the Mind* was commissioned by Scott Deal and is dedicated to him.

The trail flashes
with sluices of snow melt.
Silver-green undersides

of hemlock lift in the wind.
A warbler's electric call
climbs all the way

up the mountain slope.
That hidden waterfall
we promised to see

this spring unrolls bolt after bolt
of runoff that splashes
veils of watery lace
over stones. The canopy
creaks with pine siskins.
Mist rises above snow.

The aloneness almost too much
for one man. The surge
of the brook crashes

around boulders; a sink hole
swirls and dips. Ripples
cascade in a basin

under deadfall to plunge
into a froth of torrent.
A nuthatch debugs

a fallen branch that rocks
in the current; and a mayfly
is blown above the spray.

The Ra Expeditions - Stephen Smith

In 1969, Thor Heyerdahl built a boat out of papyrus reeds—a material often used for paper in ancient Egypt. Heyerdahl intended to sail the boat, dubbed Ra, from Morocco to Barbados. The initial trip was a failure, and the crew was forced to abandon ship. The following year Heyerdahl attempted the voyage again, and this time was successful in his journey across the Atlantic. *The Ra Expeditions*, named after the book documenting this voyage, derives many of its sound from paper, and often mimics the persistence and momentum of waves.

Every Problem is a Nail - Scott Miller

If the only tool you have is a hammer, ...
Every Problem is a Nail was commissioned by and written for pianist Keith Kirchoff. Supported in part by the American Composers Forum through the 2013 McKnight Composer Fellowship Program. When I was a student, more than a few professors attempted to teach me about the overtone series--and by extension, timbre--by holding a key down on a piano, and thwacking another key one or two octaves lower, saying 'Hear that? Do you hear that?' I never heard it. But I do now, and so much more, with the aid of microphones and amplification. Frequencies between the keys and timbres often masked or ignored are revealed with these tools, further illuminated with the addition of digital signal processing.

Foreign Masonry - Jason Charney

Foreign Masonry takes its title from Jorge Luis Borges' short story "The Aleph," about a man who discovers the titular singularity under an acquaintance's cellar stairs in which he can experience the entire universe at once. At the very end of the story, he talks about instances of other Alephs that may exist in the world:



"The Faithful who gather at the mosque of Amr, in Cairo, are acquainted with the fact that the entire universe lies inside one of the stone pillars that ring its central court...No one, of course, can actually see it, but those who lay an ear against the surface tell that after some short while they perceive its busy hum...The mosque dates from the seventh century; the pillars come from other temples of pre-Islamic religions, since, as Ibn-Khaldun has written: 'In nations founded by nomads, the aid of foreigners is essential in all concerning masonry.'

The mysterious column and its inner cosmos are imagined in several different ways: as the long, closed tube of the instrument formed by fingering the lowest note on the instrument, the harmonic series on this note (from which a majority of the piece's pitches are derived), and the "alif," the vertical first letter of the Arabic alphabet that shares a lineage with the story's title. Many of the contours of melodies in the piece were loosely traced from Arabic orthography, translations of a few phrases from Borges' story.

Gagarin - Daniel Eichenbaum

Yuri Gagarin uniquely represents a nexus of space exploration and music. Gagarin was the first person to orbit the Earth and broadcast a live musical performance from space. While in orbit, Gagarin sang and broadcast the Shostakovich song "The Homeland Hears" (Rodina Slushit). In my piece, I roughly paraphrase part of the Shostakovich melody. The "clicks" in the electronic part are actual samples I recorded of switches and dials from an old Moog synthesizer. The rest of the electronic part uses sine waves, square waves, and filtered noise in homage to the electronic music technology of the time period.

Flute Code - Matthew Burtner

I compute the air.
My breath is the code.
I compile the sound.
The flute is a computer.
My force is the processor.
I change the music.
Flute Code.

Taheen - Nicholas Elert

Taheen are a race of humanlike creatures with animal characteristics. They are mostly mammals and birdlike creatures, and most are in service of the Crimson King. Taheen are long lived and, allegedly, superior to humans physically and mentally. Most of them regard humans (or "humes", a pejorative term) as inferior, although some enjoy human arts, such as literature, and some human activities, such as basketball. They are not to be confused with the can-toi who are mostly rat-faced, wear human masks, and are admittedly inferior to humans. They have a culture of their own, with theological beliefs quite different than those of humans.

-<http://stephenking.wikia.com/wiki/Taheen>

Rain in Summer - Zachariah Zubow

Rain has many unique characteristics. Rain can be treacherous or calm. Rain is necessary for crops to grow, yet it can devastate a very large population of people. These characteristics are beautifully described in a poem by Henry Wadsworth Longfellow titled *Rain in Summer*, which inspired many musical ideas in the piece. One such inspiration includes the effect rain can have on perception.



Viewing an object through different filters of rain can change the awareness of form, which is used as musical form in *Rain in Summer*. The description of the characteristics of rain is also paralleled in the motivic development. A single motive can be heard throughout, but it is featured in many transformations.

Paper Session 2: Robots and Ensembles

2:30 PM - 3:30 PM, Newman Multipurpose Room

The Music of Dancing Cyborgs - Chris Peck

In electroacoustic music we have a heightened awareness of gesture because of how digital instruments add layers of abstraction between performer and sound. Our tools invite us to play with the linkage between gesture and music rather than relying on conventions of instrument design and performance practice. There is a symmetry and a potential kinship here with contemporary dance, which often treats its relationship to music experimentally and flexibly. But there is a contradiction at play in electroacoustic music's fascination with motion tracking technologies for dance: excitement about new forms of gestural performance on one hand, and anxieties about accessibility of "non-interactive" formats on the other. These anxieties cause some to see the gesture-music disconnect as a problem to be solved rather than a rupture with creative potential, leading to a focus on naturalistic mappings. This approach is counterproductive when it comes to working with choreographers as it undermines dance's autonomy. It encourages redundancy between music and dance rather than a flexible, composed relationship. Drawing from a survey of recent work in interactive dance technology as well as my own collaborations with dance as a composer, I suggest a different way of considering dance's perspective on such investigations.

Electroacoustic Techniques in Electromechanical Music: Musical Robots as "Real" Virtual Instruments - Steven Kemper

From the perspective of control, common techniques found in electroacoustic music are also applicable to robotic music. Robotic instruments are controlled using the same paradigms as any virtual instrument, including MIDI sequencing, algorithmic, and interactive control. Thus, musical robots can be thought of as "real" virtual instruments. They are virtual in the sense that they are computer controlled, but these devices function in the physical world and the forces of friction and gravity affect their sound. Though the division between "virtual" and "real" results in certain control models that are specific to electroacoustic music and to robots, areas of crossover include stochastic note generation techniques, interactive gestural control, synthesis techniques, and the integration of computer processing and electromechanical output. Drawing upon my own experience building and composing for robotic instruments as a co-founder of Expressive Machines Musical Instruments, this presentation discusses the similarities and differences in control paradigms between electroacoustic and electromechanical music, as well as specific ways in which I use electroacoustic techniques in my compositions for robotic instruments.

The Orchestra Of Things: a new approach to managing, controlling, and composing for laptop and mobile device ensembles - Stephen Beck and Chris Branton

A critical challenge to laptop orchestras and mobile device ensembles is the distribution, preservation, maintenance, and control of software. Prior work includes software that was developed to specifically address these concerns, along with toolsets that aided composers in creating network-savvy applications for their pieces. The control software relies on UNIX operating



systems commands, and are limited to Linux and OS X environments.

The introduction of iOS- and Android-based mobile devices into the laptop-ensemble world has created additional challenges for these early grid-based systems, as their distribution and control methods do not currently work with pads and tablets. Other kinds of musical objects have also made their way into the laptop orchestra milieu (wearable devices, embedded instruments), which may or may not be compatible with current grid-based control systems. New models, methodologies and software are needed to address this new diverse and heterogeneous technology ecosystem.

The Orchestra of Things (OoT) is a solution to this challenge. OoT is a music-oriented subset of the Internet of Things (IoT), a concept of connecting devices, home appliances, and software to provide seamless and intelligent interaction through near-field, local and wide-area networks. OoT will address laptops, phones, tables and other embedded devices that are now part of the laptop ensemble world.

Our paper discusses the OoT framework, our strategy for implementation, and the schema we will be using to classify, locate, organize and efficiently communicate between objects in the orchestra. We also discuss how we will leverage existing open-source IoT frameworks to create a robust environment for composers and performers.

Ultimately, OoT will provide software distribution, control, and network tools for that seamlessly locates and integrates OoT instruments, provides network sync and communication across multiple platforms, and enables composers to more easily compose laptop and mobile device music.

Concert 3

4:00 PM - 5:00 PM, Cube, Moss Arts Center

Way(s) to Leave Your Hexachord.....	Elizabeth Hoffman
Jay Crone (trombone)	
Amber Orbs in a White Infinity.....	Michael Rhoades
Bass Trope Smoke Grope.....	Josh Simmons
The Cascades.....	Eric Lyon
Cubic Zirconia.....	Kerry Hagan
Silbadores 4.....	Jaime E. Oliver La Rosa
Nothing That Breathes.....	John Nichols III

Way(s) to Leave Your Hexachord - Elizabeth Hoffman

This piece was written for trombonist Jay Crone. It experiments first, with spatialization as an articulator of counterpoint; and, second, with the concept of spatialized audio composed as a projection of the live performance. This piece draws on fine-grained spatialization to support myriad ways of leaving one's pitch-centric designs, and to prompt coexisting ways of listening to the resulting sound world.

Amber Orbs in a White Infinity - Michael Rhoades

strands of burning white light
 extending in all dimension
 in all direction
 infinite being
 beyond all knowing
 omniscient
 unbounded strands of living light
 ever oscillating cosmic dance
 undulating indescribable relationship
 ebb and flow of eternity
 joyously creating universes in which to play
 though eons fade away in the slightest twitch
 substance imagined
 as if reality did not exist
 lifetimes played out
 dramas unfold
 ever leading onward
 consciousness within the dream
 ecstasy in such moment
 as all is revealed
 light abounds
 immense golden web
 thin line between
 imaginings and infinity
 comical little lives (lies)
 and infinite being(s)

For this project, I was very interested in further expanding the amplitude-based 3D spatialization algorithms that I had developed in the previous project. In part inspired by John Chowing's work with his compositions "Sabelithe" and "Turneas" in the early 70's, I have developed a perspective that considers each speaker an "attractor", acting as mass in the form of amplitude, thus affecting the perceived path of a sound event as it moves through a 3D environment. With this paradigm, the greater the amplitude of a speaker, the more mass it exerts and the more powerful the effect of pulling a sound event in its direction as the event moves through the 3D space.

Bass Trope Smoke Grope - Josh Simmons

The piece consists of two sections. In the beginning, the 4 subwoofer array is taken advantage of by creating varying beating tones. This is accomplished by narrowly transposing the bassline after its initial introduction. A gate on the high hat channel is opened every time the beating surpasses a predetermined amplitude. A wash of noise opens the ears up to the higher frequencies of part two. Here, I began with an 8 part minimalist harmonisation and resequencing of the bassline, that gradually opens up into a 16 part harmonization.

The Cascades - Eric Lyon

"The Cascades" presents field recordings made by myself and Mike Roan of water sounds at various locations along the trail of the Cascades, up to the first waterfall. The original quadraphonic



recordings are staged to induce various kinds of spatial perception in the Cube.

Cubic Zirconia - Kerry Hagan

Cubic Zirconia is composed specifically for the Cube at Virginia Tech. An algorithm developed with Miller Puckette in Pd synthesizes the sounds. The title arises from the venue (the Cube) and the prototype name of the algorithm (z12). The piece utilizes all 124 channels of the cube, with 64 independent voices.

An alternative to Markov chains, z12 outputs chains of 12 numbers using percentages of previous outputs. Then using various logic operations, different sequences of the 12 numbers create a 1 or 0. These 1s and 0s are delivered at the sample rate to create complex timbres that subtly shift and evolve over time. Miller discusses this process in depth in his paper, "Maximally uniform sequences from stochastic processes."

This work continues Kerry's work with textural composition, an approach to aesthetics that relies on large sound masses developing intricate inner details over time with little gestural content. The sound object as a unit of sound is still relevant, but the object itself is a meta-object that the audience inhabits and experiences from within. Similarly, the spatialization is designed to immerse the audience in the object. The spatialization creates maximum motility without relying on trajectory-based mimetic movement.

Silbadores 4 - Jaime E. Oliver La Rosa

This is the 4th composition in a series of works Peruvian Pre-Columbian musical instruments as sound sources. These sources are combined with electronic sounds derived from the geometric shapes of the iconography found in these ceramic vessel jars and other visual art of these cultures. The geometrical nature of the iconography is also used as a source for the rhythmic generators used in this work. The piece is realized in Pure Data and can be regenerated for any number of speakers.

Nothing That Breathes - John Nichols III

Nothing That Breathes is an electroacoustic composition with underlying references to wind and breath. The composition reflects the relationship between the "wind among the deities and the breath among vital functions" (Chandogya Upanishad, trans. Patrick Olivelle). This universal theme is also suggested in the book of Deuteronomy (where the title is derived from), and in the book of Ezekiel, "Say to the wind... Come from the four winds O breath, and breathe upon these slain, that they may live..." (Chapter 37). The sustained sonorities in *Nothing That Breathes*, which may be construed to symbolize the omnipresence of wind, are layered with quickly passing events. As the composition progresses, pulsing elements resembling the rhythms of breathing are introduced. Moreover, much of the sustained material is derived from the human breath in the form of wind instruments and singing. The composer is grateful to the many musicians that participated in studio recording sessions and contributed to this composition.



President's Reception

5:00 PM - 6:00 PM, Grand Lobby, Moss Arts Center

At the President's Reception, a variety of wines, beers, and appetizers will be served in the Grand Lobby of the Moss Arts Center.

After the reception, guests are invited to view a more active version of the Salt Marsh Suite installation, by video artist Carol Burch-Brown, choreographer Ann Kilkelly, and composer Tohm Judson, in the Experience Studio of the Moss Arts Center.

Concert 4

7:00 PM - 9:00 PM, Anne and Ellen Fife Theatre, Moss Arts Center

Convergence.....	Sang Mi Ahn Heidi Radtke Siberz (saxophone)
Colliders.....	Eli Fieldsteel
Anticipations II.....	Eric Stern
Guitar Conduction #1: Taut Steel.....	Jon Nelson Chapman Welch (electric guitar)
Texturologie 7c: Wolfsbane.....	James Caldwell James Caldwell (piano)
Emergence.....	Elise Roy Elise Roy (flute), Matthew Younglove (soprano saxophone)
Mythical Spaces.....	Steve Kemper Annie Stevens (percussion)
SoundPrism 6: Dark Rituals.....	Douglas Scott

Convergence - Sang Mi Ahn

Convergence was written for saxophonist Heidi Radtke Siberz. I was interested in the interaction between the intrinsic qualities of electronic and acoustic mediums. In this piece, I used the electronics and saxophone as equal partners to take turns in background and foreground roles and to create timbral illusions. I also explored the altissimo range (very high notes) on the saxophone, which can provide unique timbral effects and is technically challenging.

There are two main ideas: trills or noodling figurations, and sustained notes. These are mutated into each other throughout the piece. The overflowing of recorded saxophone sounds at the climax is morphed into the live saxophone at the end. Most of electronic sound materials used in the piece are a manipulation of saxophone sounds pre-recorded by Heidi. The piece is dedicated to Heidi, whose passion for new music inspires me.



Colliders - Eli Fieldsteel

Developed under the working title "Chaos and Order," *Colliders* was originally premiered at the annual Ears Eyes + Feet concert at The University of Texas at Austin in 2013. The musical events are triggered and controlled in real-time via MIDI messages, originally executed as reactionary gestures to dancers' movements. The piece was later revised to be performable as a standalone musical composition.

Anticipations II - Eric Stern

"*Anticipations II*" was realized in 2014 at the NYU Steinhardt Music Technology Studios in New York. In part, the piece is a continuation of an electroacoustic miniature that Eric composed as an undergraduate in 2011. The piece explores dissonant harmony, improvisation, percussive sonic gestures and the timbral relationship between electronic sounds & piano. The sounds in this composition come from of a large palette of sources, including the striking of various metallic objects, sounds from the Buchla 100 and ARP 2600 modular synthesizers, digital synthesized and sampled effects, and original piano music.

Guitar Conduction #1: Taut Steel - Jon Nelson

Guitar Conduction #1: Taut Steel was commissioned by Stefan Östersjö. The composition is a structured improvisation that explores a variety of contemporary electric guitar techniques within an acousmatic context. The score is intended to provide a rough framework within which the guitarist improvises in response to the fixed media. The work constitutes an acknowledgement of the influential role rock music played during the formative years of my musical training.

Texturologie 7c: Wolfsbane - James Caldwell

There are thirty-six pieces, so far, in my *Texturologie* series. The pieces are influenced by continuous-field or all-over-pattern paintings, and I borrowed the title from a series of paintings by Dubuffet. I have made several lithographs that draw on imagery from Karl Blossfeldt's enlarged photos of botanical images, including a somewhat abstracted and slightly anthropomorphic print of Wolfsbane. *Texturologie 7c: Wolfsbane*, for piano and fixed sound, lives somewhere in the universe of Harold Budd, Bill Evans, Cold Blue, Schubert, and Hearts of Space. The fixed electronic music is non-rhetorical and ambient, though it has a long-range register shape. The piano music shifts between contributing to the ambient sound world and more rhetorical gestures—statements and counterstatements, development, return, and so on. The harmony in the fixed electronics is based on a technique of chromatic weighting with gradual transformations in the weighting throughout the piece. The harmony in the piano music is organized around a general opposition of two transpositions of a four-pitch collection in a chromatic-mediant relationship.

Emergence - Elise Roy

Emergence is an unusual piece for me. The sound materials employed are strongly associated with concrete, physical actions; they are gritty, unpolished, and blocky. Yet, in this work, these sounds are presented in a manner that deliberately distorts the listener's perception of physical actions, whereby small sounds become big, and big sounds expand to frame the small. These materials are abrasive and unrefined; still, their internal contradictions in color strive to resolve themselves into a logical framework. But, in many ways, emergence is about frustration and struggle -- manifest not only in the sound materials and their treatment, but ingrained in structure and form as well. The



work becomes fixated on internal conflicts and any egress here is only an illusion...

Mythical Spaces - Steve Kemper

Mythical Spaces explores the intersection of myth and place. Such spaces can be imaginary, real, natural or human-made. They are the sites of mythical events and bridges to the spiritual world. Each of *Mythical Spaces*' five movements: i. *Underground*, ii. *Water*, iii. *Forest*, iv. *Mountain*, and v. *Temple*, creates an imaginary sonic landscape as well as a musical reflection of locations that possesses cross-cultural mythical significance. These range from the imaginary in "*Underground*" and "*Water*," which focus on primordial ideas of Native American creation myths, to the natural in "*Forest*" and "*Mountain*," to the human-made in "*Temple*." Amplified "vessels," one for each movement, reproduce the material physicality of each of the five spaces.

SoundPrism 6: Dark Rituals - Douglas Scott

SoundPrism 6: Dark Rituals is part of a cycle of works in which each piece is based on a narrow are all transformed into grotesque blasts of color, texture, and rhythm. All sounds were processed using RTcmix software tools, and the final mix was done in Logic Pro.

Concert 5

10:00 PM - 11:30 PM, Theatre 101

LocoMotives.....	Anne Neikirk Elizabeth Huston (harp), Andy Huston (visuals)
Imagined Destinies.....	Jeffrey Stolet Jeff Stolet (Kyma and wired book)
Bizarre Bazaar.....	David Mooney
Melange.....	Aaron Anderson
Things That Live in the Whirligig.....	Adam Vidiksis Adam Vidiksis (laptop, percussion)
Labyrinth.....	David Dow
Ausgang.....	Stephen Hennessey Stephen Hennessey (guitar)
Pressure.....	Michael Thompson
Environmental Rhythm Etude No. 1.....	Ethan Greene

LocoMotives - Anne Neikirk

There is a certain thrill in witnessing a train whiz by at close range, but not without some implication of danger. I reflect this emotional content in *locoMotives* with dissonant, violent sounds in the electronics and harsh extended techniques in the harp that elicit the same excitement and fear. There are also moments of peaceful repose throughout the work, embodying the comfort of riding in a train while watching the landscape pass by. A series of live shadow projections onto a wall place the viewer both inside and outside the train. The title, *locoMotives*, lends itself to a tongue-and-cheek word play between the train theme and the musical terms inherent in the word: loco for "at pitch" and motive for a short musical idea. The germinal sound source in *locoMotives*



is a recording of one of Philadelphia's Regional Rail trains passing by. The Doppler effect became the connective element in the piece. I recorded the harpist playing several pitch bends on the harp that mimic the train whistle's pitch bending as it passed by. The natural dynamic arc of a train approaching from a distance, passing by, and fading away again is also imitated throughout the piece. All aboard!

Imagined Destinies - Jeffrey Stolet

Imagined Destinies is a real-time interactive performance composition for Kyma, a book and two microphones. One microphone is an inexpensive contact mic that picks up percussive impulses that control the sonic fabric of the composition; the other mic receives my voice as input and is processed in real-time. The text focuses on the challenges of two countries working towards a deep and lasting friendship. The text used in the composition comes from the *Book of Imagined Destinies* and is given below:

当我们长途跋涉通过教堂的苦难，生活的折磨已经使我们勇于对抗，我们共同的人性，我们的热情，我们的爱会消融我们路边的参差岩石，那些路弄伤了我们的脚，却使我们互相拥抱联合起来拥有最深的友谊，也使我们灵魂相依。

Translation: Though the torments of life have antagonized us as we trudged through our experiential miseries, our common humanity, our passions, our loves, will melt away the jagged rocks along our paths that have bloodied our feet enveloping and uniting us in the deepest of friendships as our souls entwine.

Bizarre Bazaar - David Mooney

The text of this piece consists of thirty-eight sentences, each sentence containing the word "bizarre," self-selected from a pool of sixty and read by the thirty-eight people who selected them using equipment ranging from cell phones to high-end studio technology. Another officer, unidentified, said, "It looks ritualistic," this single remark providing the basis for an incredible amount of bizarre speculation.

Melange - Aaron Anderson

Melange was composed using coffee related sounds exclusively. The form of the piece is derived from the coffee making/drinking process, beginning with the grinding of the beans and ending in a high-energy/over-caffeinated state. Various particle synthesis methods were used in the creation and manipulation of sonic gestures with varying degrees of stochasticity. An abrupt change in the pacing of this piece reflects the change in attention span length one faces after consuming too much caffeine. Ideas become shorter and less predictable yet show an increase in potency. The title draws parallels of coffee to the spice from Frank Herbert's *Dune* novels, which can give one both the ability to see into the future and control of the universe.

Things That Live in the Whirligig - Adam Vidiksis

Spinning, spinning, spinning... we greet the wondrous creatures that live within the whirligig. This piece explores textures created through spinning, or that evoke whirling. As the whirligig goes round and round, I imagine a menagerie of creatures great and small that reside within. This work is based on a poem composed by my mother when she carried me, and I dedicate it to my newborn daughter. "*Things That Live in the Whirligig*" is for solo multi-percussion and live processing, composed in Pure Data. "For things once seen are pulled within the whirligig of mind, where they



are tamed, and in the heart framed, to be used over again in time..."

Labyrinth - David Dow

Labyrinth is a puzzle with many dead-ends and one winding path that leads directly to the goal. The goal in this composition is to follow the winding path of timbre shifts to their conclusion. *Labyrinth* is an acousmatic work with stereo sound composed with image to sound processing, spectral analysis (FFT) synthesis and microtonal tuning synthesis.

Ausgang - Stephen Hennessey

Ausgang is a sentimental work structured around the development of a simple melody through episodic processing. Source material for the electronic component is generated entirely through the live performance, and is realized within Ableton Live, using both standard devices and community produced Max4Live patches.

Pressure - Michael Thompson

Vibrations and distortions from a physical model of a tube under extreme pressure...

Environmental Rhythm Etude No. 1 - Ethan Greene

Environmental Rhythm Etude No. 1 (2013) is a study of the patterns, pitches and periods found in the song of the North American Tibicen cicada. The piece combines synthesized elements with archival recordings – contributed by the University of Connecticut Department of Ecology and Evolutionary Biology – in a fluid mass of blooming textures.

March 27, 2015

Meditation

8:00 AM - 9:00 AM, Learning Studio, Moss Arts Center

Listening Rooms

9:00 AM - 5:00 PM, DISIS Lab, Newman Library; Perform Studio, Moss Arts Center

Installations

9:00 AM - 5:00 PM, Cube Hallway, Fife Mezzanine Lobby, Fife Balcony Lobby, Moss Arts Center; XYZ Gallery

Paper Session 3: New Tools and Technologies

9:00 AM - 10:00 AM, Multipurpose Room, Newman Library

Composing Mixed Music in Pure Data using the [notes] external for computer assisted notation - Jaime E. Oliver La Rosa

In this paper I will examine the applications and benefits of generating mixed music and music



notation in Pure Data (Pd). I will first introduce a new external for Pd that allows the user to generate musical notation live from a patch using the music engraving software Lilypond. Then I'll review some existing music software for computer assisted composition (CAC) and computer assisted notation (CAN), and examine the advantages and needs for working inside an interactive graphical real-time patching language such as Pd. I will then explain the syntax and processes of the notation algorithm and delineate the general features of the external, which can notate not only pitches and rhythms, but also dynamics, articulation, phrasing, etc. as well as being capable of producing multiple staves and voices.

Through the use of already existing pieces generated with this system, I will then demonstrate how the application of this software affects the compositional process.

My central argument is that real-time notation allows the composer to gradually sculpt a compositional algorithm and evaluate its results experientially. The output of the algorithm can be recorded throughout the process or as the output of the final version of the algorithm. In particular, when the composition generates both instrumental and electronic parts, and/or when the algorithms of these parts are being developed in parallel, live notation enables the production and synchronization of "tape parts", as well as the thorough testing of interactive patches in advance of rehearsals. This allows composers to evaluate a composition as a sonic experience in advance of its performance much like one would do with a purely electronic work.

Philosophically, this method of interactive composition favors open works, allowing for the generation of multiple versions of a piece, making the patch or algorithm the composition, and notation its documentation.

Wireless sensing and data processing techniques with eMotion Tech - Chet Udell

In our current era, where smartphones are commonplace and buzzwords like "the internet of things," "wearable tech," and "augmented reality" are ubiquitous, translating performance gestures into data and intuitively mapping it to control musical/visual parameters in the realm of computing should be trivial; but it isn't. Technical barriers still persist that limit this activity to exclusive groups capable of learning skillsets far removed from one's musical craft. These skills include programming, soldering, microprocessors, wireless protocols, and circuit design.

This hands-on workshop provides an exciting, fun, and gentle introduction to a wireless sensor hardware/software package that enables electronic musicians and composers to quickly overcome these significant technical barriers. In the duration of 60 min. participants will use 8 eMersion Gesture Control systems to explore nuanced, dynamic, and idiomatic ways to translate movement, proximity, pressure, light, orientation, and momentum into data streams that control virtually any program on a computer or OSC-enabled device.

Participants should bring their own computers and download a free copy of the eMotionSoft applications. No programming, soldering, or circuit experience required.

Maximally uniform sequences from stochastic processes - Miller Puckette

An algorithm is presented that is capable of generating sequences of tokens having specified frequencies of individual elements or subsequences, in a maximally uniform way. As special cases the algorithm can generate Euclidean rhythms and the original ("algae") Lindenmayer system.



Secondary sequences constructed from these primary ones show features on a wide range of time scales. A recently completed piece by a collaborator of the author successfully builds these low-level features into a musical idiom.

Concert 6

10:30 AM - 11:30 AM, Anne and Ellen Fife Theatre, Moss Arts Center

Unimagined Bridges.....	Charles Nichols Blacksburg High School Band, Darrell Pearman (director) Blacksburg Middle School Choir, Charlotte McKee (director) Charles Nichols (computer)
Crayonada's Hat.....	Nathan Asman Nathan Asman (laptop, hat)
Violin Power.....	Mark Phillips Nicole Paglialonga (violin)
Apocryphal Chrysopoeia.....	Paul Hembree Hummingbird Medicine.....Chapman Welch Dino Georgetown (vibraphone)
stringstrung.....	Sam Wells Benjamin Wedeking (guitar)

Unimagined Bridges Charles Nichols

In *Unimagined Bridges*, the percussion section bows and strikes vibraphones, xylophones, tom-toms, and cymbals positioned in stereo on either side of the band, a small choir sings and rings handbells, and the band enters with harmonic washes and melodic fragments, while the computer accompanies with jittery imitations of the acoustic timbres.

Unimagined Bridges is inspired by the poem "As once the winged energy of delight...", by Rainer Maria Rilke.

As once the winged energy of delight
carried you over childhood's dark abysses,
now beyond your own life build the great
arch of unimagined bridges.

Wonders happen if we can succeed
in passing through the harshest danger;
but only in a bright and purely granted
achievement can we realize the wonder.

To work with Things in the indescribable
relationship is not too hard for us;



the pattern grows more intricate and subtle,
and being swept along is not enough.

Take your practiced powers and stretch them out
until they span the chasm between two
contradictions...For the god
wants to know himself in you.

-Rainer Maria Rilke

Crayonada's Hat - Nathan Asman

Crayonada's Hat is written for Max/MSP and Ableton Live. The audio samples are taken from a previous composition of mine called *Crayonada* (hence the title). I then applied a series of individual effects (which involved the convolving, filtering, and transforming of each sample) to each track to morph them into something that, while still relatively similar to the original composition, were also very different.

My instrument of choice was the eMotion Technologies' Twist sensor suite, which I mounted onto my hat. While the Twist offered a myriad of different data streams that I could use as CC messages, I was also able to remap and reshape those same data streams into triggers, which allowed me to achieve an exponentially more interesting performance and musical result. I had several different data streams mapped to effects processing parameters, panning, and volume. I then triggered a specific sequence of events that controlled which track(s) were being heard. Whichever track was triggered also switched the panning controls to that specific track, to make it more apparent which track I had just turned on. Following the sequenced triggering, I then randomly triggered the state of each track to being either on, off, or partly on.

Violin Power - Mark Phillips

Violin Power is composed for solo violin and interactive media. The accompaniment consists of three main components: 1) many layers of granular synthesis of the opening few measures of the violin solo; 2) nearly continuous doublings, distortions, and filtering of the solo line that mimic those used by many rock guitarists; 3) percussive outbursts and bass tones created from processing noise-based samples (tapping on the instrument, bow scratching, etc.).

Apocryphal Chrysopoeia - Paul Hembree

Apocryphal Chrysopoeia is a generative, synesthetic, virtual instrument that allows a computer musician to explore a space of light and sound simultaneously. The conceptual core of this virtual instrument is a columnar structure of forty-eight cells, represented visually by light-producing geometric primitives and sonically by synthesized tones. These cells are arranged in space according to a multi-dimensional model of traditional equal-tempered pitch perception. In this model, harmonic proximity is correlated with spatial proximity. Furthermore, as in a real space, distant events sound quieter, while closer events sound louder. Thus, observer proximity and the shape of collections of nearby cells creates the sensation of harmonic fields. As the array of cells rotates these harmonic fields modulate as new pitch-classes are introduced. The array of cells is activated by a two-dimensional, hexagonal cellular automata, which is wrapped onto the three-dimensional columnar structure. Cellular automata were chosen because of their ability to evolve in a dynamic



and variegated fashion across space in a way that resembles, but is not identical to, musical voice-leading. The performer creates musical behavior and drama by manipulating cellular activity directly or environmentally, while navigating and distorting the virtual space, highlighting the sound and light activity at various locations.

Hummingbird Medicine - Chapman Welch

Hummingbird Medicine presents a series of musical materials with varying degrees of consonance and dissonance. Each of the materials is developed and then frozen in place and allowed to hover. The computer provides harmonic support and uses pitch and amplitude data from the live vibraphone to control the processing of live and synthesized input. The piece was written for and is dedicated to Patti Cudd.

stringstrung - Sam Wells

stringstrung, for guitar and digital media, was commissioned by and is dedicated to my dear friend, John Doe. The digital audio is entirely derived from acoustic guitar samples. The work is loosely inspired by the strings of a guitar and the last stanza of "87" by E.E. Cummings:

what a wonderful thing
is the end of a string
(murmurs little you-i
as the hill becomes nil)
and will somebody tell
me why people let go
- E.E. Cummings
© Grove Weidenfeld

Concert 7

1:00 PM - 2:00 PM, Cube, Moss Arts Center

Talos.....	Lucas Smith
Twitch 124.....	Jon Anderson
Wherever We Are.....	Bruno Ruviano L2Ork (laptop orchestra) Ivica Ico Bukvic (director)
a glass mirror...to see your soul.....	Andrew Smith
Photographs of Water.....	Neal Farwell
Jostled.....	Mike Polo
Sonic Space No. 5 - Iteration No. 2.....	Michael Musick Michael Musick (tingsha bells and sonic ecosystem)
as hovering ashes in a quarter moon.....	Chen-Hui Jen Alex Fowler (cello), Jacob Sudol (laptop)

Talos - Lucas Smith

In Greek mythology Talos was a giant, bronze automaton forged by Hephaistos and sent by Zeus



to protect Europa on the island of Krete. Talos patrolled the island daily, driving pirates and invaders from the shore with volleys of rocks or a fiery death-embrace. According to the *Argonautica*, Talos attempted to prevent Jason and the Argonauts from landing on Krete with the newly acquired Golden Fleece. Unable to land, Jason called on the enchantress Medea, who summoned spirits of death to torment Talos. In a confused state, Talos was finally defeated when he scraped his ankle on a sharp rock, allowing his life-giving icor to drain from his veins. Weakened, Talos fell with a tremendous crash and died. *Talos* (2014) was inspired by this general program.

Twitch 124 - Jon Anderson

"*Twitch 124*" is an acousmatic, fixed media composition. Samples of falling (whole grain) rice grains were processed and manipulated using a variety of granular patches by the composer in Max. These sounds were placed into an ambisonic 124-channel sound field and choreographed in the field using the Kinect's infrared camera. Panning width, height, and location of sound events were influenced by location of joints on the composer's body moving in space, resulting in this kinesthetically twitchy sound environment.

Wherever We Are - Bruno Ruviaro

Using textual and musical quotes from John Cage as points of departure, this piece puts the simple act of typing at the center of musical performance. For the audience, reading typed text projected on a screen becomes a playful puzzle accompanying the sonic experience. *Wherever We Are* was originally composed for SCLOrk, the Santa Clara Laptop Orchestra.

a glass mirror...to see your soul - Andrew Smith

This piece was drafted during the fall of 2013, using a limited number of sound sources associated with the art of glassblowing. Sonic material was derived from field recordings taken at Gathered Art Gallery and Studios (Toledo, OH, USA), where the proprietors gathered and manipulated molten glass in their studio Hot Shop. The final composition—completed in 2014—is a meditation on a quote by the Irish playwright George Bernard Shaw: "You use a glass mirror to see your face; you use works of art to see your soul."

Photographs of Water - Neal Farwell

At an artists' residency in Florida in 2008, I met two poets whose voices caught my ear and whose words hooked my thoughts. David, in his twenties, voraciously inquisitive, contemplated mortality. Ann, in her eighties, looked back questioningly on a life well lived. They recorded several poems with me, to use in this piece. Beyond the poems, I recorded many new sound materials, and drew others from a personal catalogue spanning a decade. Instrumental materials owe to my alter-ego as violinist and conductor. Many of the sounds were recorded in Britain and France. A tentative conversation between ages, and places, the piece is a contemplation of the passing of time and lives

The texts are excerpts from *Drought, Life, and Photo of my Dad* by David Bartone (1980 –); and *Kayak*(complete), and excerpts from *On Entering My Seventies and Reading the Tao Te Ching at Eighty*, by Ann Brewer Knox (1926 – 2011). Orchestral materials were recorded with the University of Bristol Symphony Orchestra. The pipe band was recorded at a street parade at the Festival de Cornouaille 2012 in Quimper, Brittany.



Photographs of Water was premièreed at the Electroacoustic WALES concert at Bangor University on 7 November 2013.

Jostled - Mike Polo

Jostled was composed with the audio software Max/MSP and Kontakt5. Close microphone recordings of a ride cymbal played in a variety of methods served as the source materials for the work. Various digital signal processing techniques including granulation and formant synthesis processes were then applied to the source materials, after which an analysis of the FFT was done to determine which resonant frequencies were most prominent. Further processing of the ride cymbal was done to distort its original audio image in an effort to recreate the ride cymbal as a 'new' percussion instrument. This processing lead to sounds that manifested as short instances or percussive bursts, which when placed next to each other creates a jostling effect. In this piece, this 'new ride cymbal' presents itself over 40 times in a varying, yet related fashion.

Sonic Space No. 5 - Iteration No. 2 - Michael Musick

Sonic Space No. 5 is part of Michael Musick's ongoing Sonic Spaces Project. These interactive music systems are defined as Sonic Ecosystems. These systems are coupled to the physical space where they are installed by having microphones throughout the space capture all sounds, and by having speakers return sound to the entirety of the space. This way, the acoustic properties, the human-agents, other sound making agents, and the software-agents of the system become reliant upon each, affecting the final experienced performance. All of the musical elements that create the final performance originate from the physical space and are processed within the system.

Iteration No. 2 is adapted for fixed duration concert presentation. The audience is asked not to purposefully contribute sonic energy. However, their presence greatly affects the final composition due to the addition of their bodies.

For the performance of this piece, the performer introduces sonic energy into the space from a central position near the mixing console. Using Tingsha bells to the wake agents in the system up. This will in turn cause further responses from additional agents. The presentation of the piece will last 10-minutes, and complete a full cycle of energy usage within the ecosystem.

as hovering ashes in a quarter moon - Chen-Hui Jen

The work's primary image represents hovering ashes in the air after fire, including dust and residue. This vivid image came from a funeral ritual that I went a few years ago and stayed in my mind for a long time: all the family members and Buddhist nuns stood in a circle surrounding the offering stuffs, chanting, the fire then started and burned down everything in a short period of time. Nothing left but emptiness, as if one's life ends. These memories inspired some musical ideas those are later realized in this work.

The work consists of five sections that follow this approximate context: (1) returning to the earth, (2) chanting in the flying ashes, (3) drifting, seeing lights from another land, (4) hovering towards the heaven bells, and (5) as if mountains emptied into haze. To represent the sound space of these images, I applied some live processing effects to the virtuosic cello line, including frequency shift, delay, and ring modulation, together with some



playback sounds. This work is like a ritual, through which everything eventually turns into ashes, as emptiness, including spectra and sounds.

Paper Session 4: Workshops

2:30 PM - 4:30 PM: Multipurpose Room, Newman Library

PWGL Workshop - Douglas Geers, Nicholas Nelson, and Stephen Wierenga

Many composers of electroacoustic music are familiar with software such as Max/MSP, Pure Data, and Supercollider, which allow one to build custom systems for composition, sound synthesis, and audio/video processing.

This workshop will introduce composers to the freeware system PWGL (Patchwork Graphical Language), a Lisp-based application that looks similar to Max and PD but which is optimized for manipulating notational representations of music, including standard Western notation, proportional notation, graphic notation, and analytical markings. Composers may use algorithmic techniques to generate and alter pitch materials, rhythms, dynamics, and articulations, all of which may be displayed as conventional notation, from solo lines up to orchestral scores.

PWGL and its kindred applications, Patchwork and OpenMusic, have been used by a wide range of composers including Tristan Murail, Brian Ferneyhough, and Magnus Lindberg. However the software is aesthetically neutral and may be used to compose in any style. Its output may be easily rendered as MIDI or Music XML, for import to applications such as Sibelius, Finale, Pro Tools, Ableton Live, Csound, Max/MSP, or PD. PWGL also has synthesis capabilities for generating audio output directly.

The current version of PWGL runs on Mac OS and Windows XP. It may be downloaded here: <http://www2.siba.fi/PWGL/>

Introduction of A General-Purpose Interactive Dance Methodology - Kazuaki Shiota and Karen Wissel

Most dancers appear to remain indifferent to the pioneers' achievements of interactive dance, including but not limited to Leon Theremin's Terpsitone, Warren Burt's 3DIS, Godfried-Willem Raes' ultrasound system, Wayne Siegel's DIEM Digital Dance Interface, David Rokeby's VNS and softVNS, and Mark Coniglio's Isadora. Even though dancers have opportunities to collaborate with composers who develop interactive dance systems, they are prone to discontinue collaborating with composers because of the following tendencies. 1) Overuse of motion sensors limits the dancers' visceral expressions. It is also common that sound making methods never change during performances (e.g., a dancer's movement, captured by camera, triggers sounds). 2) Lack of interdisciplinary communication skills (e.g., composers or programmers usually design their interactive dance systems without dancers' opinions). 3) Interactive dance is not directly related to dancers' careers. As a solution to these problems; our team, consisting of dancers and composers, will introduce the participants to a general-purpose interactive dance methodology for establishing long-term collaborations. This methodology contains 1) a notation system that articulates the relationship of interaction activity between performers, 2) an interactive sound system designed for interactive dance performance, 3) improvisation techniques with dancers, and 4) terminologies for communicating with dancers (especially contemporary/modern and ballet). In the workshop, the participants are encouraged to use their own laptops and/or interactive systems to engage in a laptop ensemble with dancers. We would like to have a couple of members from the Linux Laptop Orchestra (L2Ork), Jay Crone (trombonist), and Annie Stevens (percussionist; bass drum and snare drum) to demonstrate diverse instrumentation and orchestration regarding interactive dance for the participants.



Banquet

5:00 PM - 7:00 PM, The Inn at Virginia Tech

The Banquet will included a menu of regional dishes, served in stations around the conference space of the beautiful Inn at Virginia Tech, along with wine at the table and a cash bar.

Concert 8

7:30 PM - 9:30 PM, Anne and Ellen Fife Theatre, Moss Arts Center

Youngman/Overholt.....	Jon Bellona Seung-Hye Kim (piano)
Rite of Passage.....	Mikel Kuehn Marianne Gythfeldt (bass clarinet)
Hiram.....	Richard Johnson Cheryl Melfi (clarinet)
Immayah.....	Kuei-Fan Lin Ariana Wyatt (soprano)
Bellows 2.....	Chris Peck and Kevin Davis Kevin Davis (cello and electronics) Chris Peck (flute and electronics)
River Rising.....	Kirsten Volness Lilit Hartunian (violin)
Kingdom of Names.....	Halim Beere Trevor Davis (clarinet)
reFRACTion.....	Mark Zaki Mark Zaki (violin)
Twilight Shift.....	Benjamin Broening Mary Boodell (flute)

Youngman/Overholt - Jon Bellona

Youngman / Overholt was written in honor of my grandmother, Betty Jane Youngman Overholt, who passed away in early 2013. BJ performed the accordion and piano from a young age and had perfect pitch. Although she become completely deaf the last 20 years of her life, she taught herself to read lips, and she could still play classic tunes on the piano perfectly from muscle memory. Sadly, because of her hearing, my grandmother never could listen to the music I wrote for her, even while alive. The electronics for *Youngman / Overholt* are based on a 2011 voice recording of BJ talking about her husband (my grandfather), David Overholt, while he was in the ICU several weeks before his death at age 90. They had been married for 68 years.



Rite of Passage - Mikel Kuehn

Rite of Passage was composed in 2013-14 and was commissioned by New York-based clarinetist Marianne Gythfeldt. The title is a pun on the material used as the basis for the piece – the famous bass clarinet passage from the opening of Stravinsky's *Rite of Spring*. Since discovering the Rite as a teenager, I have been mesmerized and vexed by this particular instrumental excerpt. After over 25 years of marveling at how, in a single passage, Stravinsky almost destroyed the possibility of anyone else ever being able to so elegantly capture the essence of the bass clarinet, I finally decided to embrace my fear of this famous lick and create a piece that celebrates it by constructing every aspect from its structure. *Rite of Passage* is cast in four main sections, each treats the material in a different manner. The pairing of bass clarinet with live electronics is particularly fitting as the instrument exhibits multifarious qualities that are similar to electroacoustic music (timbre modification, dynamic shaping, etc.). The basic narrative of the work is one where the bass clarinet searches for its identity and its relationship to Stravinsky's lick. The work closes with a short coda, which finally quotes Stravinsky's famous passage.

Hiram - Richard Johnson

Hiram Bingham III is frequently credited as the "discoverer" of Machu Picchu. At the dawn of the twentieth century, he was guided by local Quechua campesinos to the awe-inspiring ruins that overlook the Urubamba River Valley. He dedicated many years of his life to the exploration of the Peruvian Andes and the remnants of Incan civilization, still inhabited by Quechua and the mysteries of an ancient people.

Hiram is part of a set of pieces for soloist and electronics entitled *Quaerere Sententias*, "search for meaning," intended to explore examples of humanity's quest for meaning. Musical material is influenced by Andean traditions such as the huanyo, and samples of a zampoña, a qena, and a cajón are featured, both guiding and sought by the clarinet.

Immayah - Kuei-Fan Lin

The piece *Immayah* is the third movement of my composition for chamber ensemble and electroacoustic music, which is entitled *Trinity*. The piece *Trinity* is inspired by the basic triune principles of traditional Christianity: three persons, one body. The three movements convey the ideas of the Father who generates, the Son who is begotten, and the Holy Spirit who proceeds, respectively. The third movement, originally written for soprano, chamber ensemble and electroacoustics, was adapted for soprano solo and electroacoustics. It depicts that the Holy Spirit dwells within believers and guides them on their way to eliminate the darkness and sin. Immayah is the Hebrew sacred name which honored and anointed the Holy Spirit. The Holy Spirit is symbolized as the fire and dove. The texts in this piece are extracted from the Bible to illustrate the relationships between the Holy Spirit and these two symbols. The piece ends with the idea of the Trinity to conclude the whole three movements. In the electroacoustic part, most sources are from pre-recorded soprano sounds. Several computer music techniques are used, including fast Fourier transformations, phase vocoder, and many digital audio signal processing techniques to create the conversation between the live soprano and electronically manipulated soprano sounds.

Bellows 2 - Chris Peck and Kevin Davis

The flute and the cello use the breath very differently—the flute literally and the cello figuratively, through a tradition of imitation of vocal phrasing with the bow as a stand-in for breath. *Bellows 2* intervenes in each instrument's relationship to breath through both compositional and



technological means. The flute becomes an instrument of indefinite sustain, while the cello's spectra are fragmented and rearticulated. We explore the expressive potential of the breath through designed extensions, interruptions, and displacements. We also modify our instruments to address their differences. The headjoint of the flute is replaced with a tin whistle that can be slid in and out of the body for fluid celloistic pitch bending. A delay network takes up a function something like a bow (or an extra set of virtual lungs). Amplified and processed cello offers a wider range of noisy timbres evoking air. The form is a particular matrix of possibilities with respect to available overtones, playing techniques, gestures, and muscle memories determined by particular focal pitches. These pitches also serve as a point of contact for the players as they negotiate very different physical situations.

River Rising - Kirsten Volness

River Rising is an elegy to those who have lost friends, family, livelihoods, and communities—sometimes an entire existence that can never be recovered—to unexpected tragedy. The hopelessness and horror that tsunamis, hurricanes, floods, earthquakes, war, illness, climate change, and other catastrophic forces may bring seem surreal, having never lived through anything like this firsthand. I wanted to take a moment to reflect on being overwhelmed entirely by situations beyond our control that may only be endured together. Special thanks to Mary Kouyoumdjian for letting me play and sample her beloved Siran.

Kingdom of Names - Halim Beere

Kingdom of Names, for Bb Clarinet and fixed media, draws its inspiration and structure from the names of the principle figures of the Baha'i Faith, who are Baha'u'llah, (The) Bab, and Abdul'Baha. Each of these names has been translated into a sequence of pitch classes, and these pitches (particularly the name of Baha'u'llah) inform the main motivic material as well as the sequence of 8 tonal centers through which the piece traverses (although there are 9 letters in the name, the "I" is repeated).

The concept of the *Kingdom of Names* in the Baha'i teachings is multifaceted. In one sense, attachment to this kingdom can be a mighty barrier to spiritual progress and among the greatest struggles for the seeker of truth. In another sense, all of creation is said to be a part of this kingdom, endlessly reflecting the names and attributes of its Creator. I tried to express the tension between these two viewpoints, between struggle and awe. This composition is a kind of meditation on the nature of the *Kingdom of Names*, of which it and we are all a part.

reFRACTION - Mark Zaki

reFRACTION is an object that reflects its own history. Revealed through iterations of fragmented material, its final form is realized through the accretion of layered sound over time. From a simple and transparent opening statement, a foundation is derived which subsequently remains below the surface. Fragments are captured, processed, and added to a slowly evolving fabric.

There's no attempt to apprehend any musical narrative directly, the piece only does so in retrospect. The ear chooses between current and past events as histories begin to emerge and compete with one another – often productively, but also in ways that can be unresolved. To a certain extent, *reFRACTION* could be viewed as metaphor – a palimpsest of existence, where the past is covered up but continues to visibly influence the present.



Twilight Shift - Benjamin Broening

Twilight Shift explores the liminal light of dusk as shadows lengthen, the bright colors of day darken, and the familiar world is gradually transformed. A comparable transformation takes place in *Twilight Shift*: the flute and electronics slowly descend to lower registers over the course of the piece as flute sounds are gradually replaced by whispering percussion sounds in the electronics.



Concert 9

10:00 PM - 11:30 PM, Theatre 101

Torsion for Viola and electronics.....	Derek Hurst Ashleigh Gordon (viola)
Hospício É Deus: Valsa.....	Timothy Johnson Timothy Ernest Johnson (guitar)
Trittico Mediterraneo.....	Konstantinos Karathanasis grainstream.....
fzzl.....	Dan VanHassel Joseph Van Hassel (snare drum)
81 Zalms.....	Stephen Lucas Stephen Lucas (soprano recorder, live electronics)
Number Vortex.....	Olga Oseth
Divertimento.....	Matthew Omahan
One Note Solo.....	Ted Coffey and Aaron Henderson

Torsion for Viola and electronics - Derek Hurst

Torsion for amplified viola and electronics was written in 2014 for violist Ashe Gordon. The electronic component was realized using a combination of CsoundQT and several hundred samples processed and assembled in Pro Tools and Max/MSP. The electronic part forms a complement to the live instrument that oscillates between textures that, at times accompany the instrument and, at others, transmutes it. The title of the work serves as a conceptual guide in composition rather than a reflection of an underlying mathematically derived narrative.

Hospício É Deus: Valsa - Timothy Johnson

This work is from a series of works inspired by the writing of Brazilian author Maura Lopes Cançado, specifically her book *Hospício É Deus (Diário I)*. The title of this book translates to "The Asylum is God." It relates her experiences while interned at the Gustavo Riedel psychiatric hospital in Rio de Janeiro in the years 1959 to 1960. The book is written in the form of a diary and explores themes of human tragedy, poetry and eternity. "Valsa" refers to a scene in which Cançado asks one of the patients, a former opera singer, to sing the "Valsa da Museta" aria from *La Bohème*. *Hospício É Deus: Valsa* was composed as a musical diary, a sequence of "diary entries" related to musings on Cançado's writings. The diarist is represented by a guitar duo—one live, one virtual. The virtual guitar is realized using a sample set recorded by the composer driven by Common Music/CLM and uses a 7-limit just tuning built on a just chromatic filled in with septimal microtones to produce a 21-tone scale. The tension between the inner/outer worlds of the diarist is represented by the interaction of the two tuning systems and other musical elements.



Trittico Mediterraneo - Konstantinos Karathanasis

The opening movement, *Pastorale*, is based on sheep and goat bell samples and related environmental recordings collected at a mountainous Greek village. The work is a personal sonic interpretation and response to the Renaissance and Baroque paintings of the same theme. I am fascinated by old, spacious cobblestone squares, surrounded by tall buildings with swallows' nests, outdoor cafes and restaurants, ideal places for people to enjoy the community and for children to play. Most of the sounds used in Constitution Square at Evening are field recordings from Nafplion, Greece.

The closing movement, *Violins of Summer*, was inspired by a short poem by Yannis Ritsos:
 "Cicadas are thousands of little violins with wings
 They make wooden sounds for they miss their bow
 The summer knocks their belly with its finger.
 These knocks are later translated –
 Little hammers pounding on a soft void."

The piece was made possible with partial support from the Research Council of the University of Oklahoma.

grainstream - Nicholas Cline

I started *grainstream* by recording the sound of seeds and grains pouring into mixing bowls. The many discrete attacks of individual grains and the resonance from the vessels fuse into granular textures. From the simple gesture of pouring, I sculpted these sounds into evolving streams and scattered them across the multichannel sound-field. The first streams appear very close (hyper-real) and begin to accumulate in density. Gradually, processed (unreal) streams emerge with more aggressive characters and overtake the 'natural' sounds. Suddenly, a hail storm (real) interrupts with percussive, rhythmic character that is then washed over by swirling, ritualistic bells. *grainstream* is a meditation on the centuries old practice of seed-saving and the threats imposed by patenting seed DNA. My aim is to create a music that embraces the need for balancing variety

Nicholas Cline writes acoustic and electroacoustic music. His compositions have been performed in the US and in Europe and he was featured on the 2012 SEAMUS electroacoustic miniatures recording series: *Re-Caged*. He holds degrees from Columbia College Chicago and Indiana University. He is currently studying and teaching aural skills at Northwestern University. He has studied electronic music with Chris Mercer, John Gibson, and Jeff Hass.

fzzl - Dan VanHassel

fzzl fuses the acoustic and electronic by using a small transducer attached to the bottom of the snare drum allowing electronic sounds to resonate through the drum, rather than separate speakers. A contact microphone allows the drum to trigger and interact with electronic modifications and extensions of its acoustic sound. The piece incorporates elements of West African dance-drumming, hip-hop, and experimental electronica.

81 Zalms - Stephen Lucas

This piece is an expansion on a common trope of generating electroacoustic accompaniment from only an input sound source. The computer part is arranged into 9 scenes with different textures and behaviors. However, rather than traversing these scenes, the computer part has 9 meta-scenes



that represent a spatial orientation of the scenes; as these meta-scenes are traversed, tracking data of the input sound drives an exploration of the space of the 9 scenes. The result is a constantly expanding/contracting environment that is simultaneously controllable and unpredictable.

The instrumental part is largely improvisatory, but there is a general shape of traversal that the performer should try to achieve. However, as the performer attempts to control the computer part, each scene has a level of attraction and repulsion, forcing the performer to compromise between sounds needed to traverse the scene-space and sounds needed to compensate for the computer's influence over that traversal.

The result is both planned and malleable. Slight variations can cause a chain reaction that force the performer to compensate in ways that spin the performance into a new direction.

Number Vortex - Olga Oseth

This is an interactive piece for WiiMote and Kyma. The inspiration for this piece came from numbers. They are everywhere, in computer programs, on price tags, clocks, cellphones, toys, game track devices and many more places. Numbers are a universal language, everyone understands them, no matter what language is spoken. Thanks to my wonderful friends for donating their time to meet with me for recording sessions, I was able to record spoken numbers 1-10 in ten different languages. They are French, Portuguese, Youruba, Arabic, Russian, Ukrainian, English, Spanish, Chinese and German. Each number is put through spectral analysis in Symbolic Sound's Kyma, and is processed in ten ways. Through out the piece the sounds you hear are collaged from all the numbers with certain techniques uniting them into one composition, as I wish, that Ukrainians would unite to protect and bring back their country. This piece is dedicated to my homeland, Ukraine. With everything that has been happening over there since past November, music is the only way I can express my opinion for my country and my family.

One Note Solo - Ted Coffey and Aaron Henderson

The one note solo is a myth and reality of many musical genres -- jazz, rhythm & blues, rock, 'serious' music. In this present assemblage, our note is C, the least fancy note there is. However, 'note' is interpreted broadly. For example, frequencies related to particular Cs via the harmonic series are allowed, and clusters of these frequencies can be used to (AM) modulate other, more strictly formed Cs. Lois V. Vierk's take on the 'ostrich guitar' provides another deviation. Musical materials are derived almost entirely from tuning forks, guitars, old school synthesis both analog and digital, and the usual atmospherics. Rhythms include (among others) those of speech and those regulated by sub-audio rate Cs. For that matter, structure is regulated by periods of super-low Cs, too. The video is made by long-time collaborator XX, who was kind enough to work on it while vacationing in Japan.

March 28, 2015

Meditation

8:00 AM - 9:00 AM, Learning Studio, Moss Arts Center

Listening Rooms

9:00 AM - 5:00 PM, DISIS Lab, Newman Library; Perform Studio, Moss Arts Center



Installations

9:00 AM - 5:00 PM, Cube Hallway, Fife Mezzanine Lobby, Fife Balcony Lobby, Moss Arts Center; XYZ Gallery

Paper Session 5: New Approaches to Composition and Performance

9:30 AM - 10:30 AM, Multipurpose Room, Newman Library

Creative Strategies for the Performance of Spatial Music - Ricky Graham

This lecture presentation and demonstration will explore potential spatial audio strategies for conventional solo instrumental music, whilst demonstrating developments in my own electroacoustic guitar practice through the lens of a live performance system in Pd. Key topics will include current and developing strategies for live performance systems design, strategies for spatial music performance based on common guitar theory and approaches to guitar practice, and bodily metaphors as a basis for spatial music mapping strategies.

Turning the Tables - Rodolfo Vieira and Chris Mercer

Traditionally, once a composer has committed notes to paper, the compositional process is complete. The performer has a certain amount of interpretive freedom, but the audience is confined to a mere passive role.

How can we change this paradigm, so that an audience member can actively participate in the creative process during an actual performance?

Being able to manipulate, sculpt, shape, and create new soundscapes at a whim, and to both react and instigate, transforms the audience member into a performer on the spot. Even without prior experience or musical knowledge, the audience member can become a partner in the music-making. The ability to collaborate with an artist at this intimate level is a unique experience, one that has not been available to the majority of the concertgoing public, until now.

Such inclusivity across domains is a fascinating way to foster the emergence of new ideas, unleashing unheard-of creative potential. It opens the door to fresh collaborations and novel experiences that cannot be reproduced digitally without losing critical dimensions.

This session will feature a live violinist and an audio engineer with whom selected audience members will be able to interact by using specially designed iPad apps to control and manipulate the sound.

The iPad apps contain simple controls that when used in particular ways will produce complex outcomes. The apps are implemented in HTML5 and use the D3.js graphics library to generate controls, and to provide the physics engine behind the controls. The communication between the iPad apps and MaxMSP is coordinated with a NodeJS server via Web Sockets, allowing for two-way realtime communication.

The audio processing will include common digital processing techniques, implemented in MaxMSP. It will include Fourier based pitch shifting, analysis resynthesis, audio granulation, and cross synthesis.



Generating and testing an interpretative approach to diffusing Varèse's material for acoustic instruments - Jacob Sudol

Edgard Varèse regularly spoke of how he wished to create situations that treated "musical space as open rather than bounded." In this paper, I outline an approach I developed to explore what happens when one liberates Varèse's acoustic instrumental material from its original spatially-bound positions.

I begin by putting forth a number of statements where Varèse evokes spatial metaphors. From these, I unpack two more clearly delimited types of space that Varèse refers to – musical and physical space. After this, I consider how Varèse connects these two types of space. Finally, I propose that Varèse also envisioned his music as having a more integrated transcendental or, what I call, emotional space. To define emotional space, I adapt Antonio Damasio's neurological hypothesis that emotion and feeling derive from an individual's actual or imagined physical responses to the external world.

I use this definition to analyze how Varèse integrates emotional space in a number of iconic passages in his music. I finally use this analytical approach along with analyses by Chou When-Chung to extrapolate and experiment with different approaches to physically spatialize three passages from Déserts within a two-dimensional spatial field.

Conclusions reflect on ways these spatialization explorations can be furthered and how this approach alter the musical experience and shed new light on Varèse's artistic vision.

Concert 10

11:00 AM - 12:00 PM, Cube, Moss Arts Center

Shin no Shin.....Simon Hutchinson
 Én vågen krop.....Ryan Laney
 Pan Imparts Form to Primal Matter.....Andrew Walters
 David Wetzel (clarinet, bass clarinet)
 catena.....Rob Seaback
 Kiwooje (Ritual for Rain).....Daehoon Jang
 The encounter of the immobile.....Laurent Estoppey
 Sonic Constructions.....Thomas Ciufo and Curtis Bahn
 Breathing 2: Re/Inspiration.....Michael Pounds



Shin no Shin - Simon Hutchinson

In his essay on Japanese Aesthetics, Donald Richie explains a three-part formula for classifying the arts, shin-gyou-sou:

“The first term, shin, indicates things formal, slow, symmetrical, imposing. The third is sou and is applied to things informal, fast asymmetrical, relaxed, the second is gyou and it describes everything in between the extremes of the two.”

These three divisions, though, can also all be subdivided in threes, such as shin no sou (the more sou end of shin), shin no gyou (medium-shin), and *shin no shin* (the highest level of shin).

Én vågen krop - Ryan Laney

Én vågen krop, which in Danish means “Awakened Mind,” was composed as two continuous movements from the readings of two poems in five different languages – Danish, English, Spanish, French, and Korean. In the first poem, granular synthesis is used as the primary means of weaving each language in and out of the soundscape. The second poem, titled “*The Pulse of the City*,” begins with the granulated stream transforming into a more regular and harmonic texture; it is spoken in a clear, elegant, and largely unaltered manner. The poems were originally written in Danish and translated to English by Signe Lykke.

Pan Imparts Form to Primal Matter - Andrew Walters

My friend and colleague at Mansfield University, David B. Wetzel, approached me about writing a piece for clarinet and his interactive computer system, the Interactive Event Manager (IEM). It was to be based on a painting that hangs in his office entitled *Pan's Music Imparts Form to Primal Matter* painted by his uncle, Dan Davidson. In the painting, Pan is seen on the left side playing his pipes. The landscape in which he performs is a stark and barren: a few black lines on white paper on the left-hand side. As the viewer moves from left to right, more color, complexity, and less abstraction emerge. Through Pan's performance this slowly evolving world comes into existence. I decided early on in the process that the piece would follow the left-to-right sweep of the landscape not only in terms of dynamics and register, but also in the structure of the electronic part. I also decided to slowly alter the harmonic series on which the frequencies of both parts are based, to fit the left-to-right development of the painting.

catena - Rob Seaback

In *catena*, the typical tone-producing capacity of the piano is altered to include spectral microtonality and inharmonic timbres. While never straying far from its identity as ‘piano,’ the instrument rarely behaves in its normal fashion. Instead, it acts as a kind of hyper-instrument, characterized by increased pitch resolution, gestural complexity, and spectromorphological control. The spoken voice often assumes characteristics of the piano, and engages in its own dialogue between proximity and distance in relation to its original (source) identity.

Kiwooje (Ritual for Rain) for 5 channel - Daehoon Jung

Kiwooje means “ritual for rain” in Korean. In this piece, the shamanic ceremony for rain depicts its liturgical spirit. Ancient *Kiwooje* does not exist any more as its original shape: incantational, distracted, and nervous. It would be more brutal than I could ever imagine.



The encounter of the immobile - Laurent Estoppey

In 2010, I started to compose a series of five pieces called ‘*The encounter of the immobile*’. These pieces can be combined in any order and can be performed in various formats. The main idea of these pieces is to turn the computer into a real partner in the music. With the help of the software MaxMSP, the computer reacts to the saxophone using several parameters such as pitches and amplitudes, most of them in a ‘chance controlled’ way. Some sounds produced during this interaction are manipulations of the saxophone output, others are pre-recorded sounds or synthesized ones such as sinusoidal waves. The composition process is two-fold : first comes the programming of the computer ; second comes the framing and the decisions surrounding the musical material played on the saxophone. This second component allows for a great deal of freedom from the performer.

The vocabulary of the saxophone utilized is extremely wide, employing numerous extended techniques, such as quarter tones, microtonality, noises, a specific vocabulary I developed. In a purposefully ‘low-fi’ gesture, two loudspeakers are placed in the saxophone bell, interfering with the natural sound of the instrument and creating various sound illusions. This technique also allows for a polyphonic process and a multiplication of layers and textures. Toward the end of the piece, the sound contained inside the little chamber that is the saxophone bell slowly shifts into four loudspeakers surrounding the audience, changing drastically the perception of the music. Some parts of ‘*The encounter of the immobile*’ are based on the emotion of the sound, its inner variations, others have their roots in dramatic and touching poems by French poet Christian Guez Ricord.

Sonic Constructions - Thomas Ciufu and Curtis Bahn

Sonic Constructions is an interactive electronic music performance by composer-improvisers Curtis Bahn and Thomas Ciufu, who design, build, and perform on computer extended instruments. This performance project has developed around a gestural and sonic language that explores the expressive capabilities of a range of custom build, hybrid acoustic / electronic instruments. Utilizing a variety of physical interfaces and signal processing techniques, these constructed / composed instruments extend acoustic instruments, sound sources and field recordings through real-time computer processing and sonic transformation. Custom instruments developed by Bahn and Ciufu include the eSitar, eDilruba, the eighth nerve hybrid electric guitar, as well as a collection of flutes and percussive objects. This performance is a manifestation of the unique formal, sonic, gestural, and human relationships that emerge from interaction with (and through) these new computer-mediated instruments. These dynamic and evolving sound spaces live somewhere between foreground and background, between action and stillness, between concrete, remembered, and imagined. More than anything, these sound spaces invite us to listen deeply and to contemplate our relationship to sound, place, each other, and the sound world we inhabit / create.

Breathing 2: Re/Inspiration - Michael Pounds

Breathing 2: Re/Inspiration has its origins in a piece I composed roughly 20 years ago entitled “Breathing.” That was a very early work for me, and I have wanted to revisit the idea for a long time. This new work uses some of the original source recordings of toys and whistles (which I have been using for teaching demonstrations for years), combined with breath sounds made by my wife that I recorded nearly 10 years ago, and just a few small portions of the original piece. The composition is inspired by various aspects of breath: breath as necessary for the functioning of the body, breath as related to life force/energy, breath as meditation, breath as rhythm, and breath as self-expression.



Concert 11

1:00 PM - 2:00 PM, Anne and Ellen Fife Theatre, Moss Arts Center

Ocotillo for multi-percussion, seasonally variable electronics, and video.....	Thomas Beverly
Quirk.....	Eric Honour Trevor Davis (bass clarinet)
Surveillance State.....	Kevin Olson Peter Sommer (alto saxophone)
Sitting 328b.....	Peter Hulen
a thing of dream and mist.....	Christopher Chandler
Desert Song.....	Brian Kelly Madison Mosely (voice)
Frayed Cities.....	Phillip Sink
The Message.....	Julius Bucsis

Ocotillo for multi-percussion, seasonally variable electronics, and video - Thomas Beverly

The video for this piece, captured in summer 2013, consists of time-lapse photographs depicting the extreme dynamics of the west Texas landscape. The majority of the electronics in this piece are fixed, but I also built a computer program that receives data from the McDonald Observatory in west Texas. For each performance, the software translates the temperature data from the prior day into a new layer of audio that colors the piece differently depending on the season. For example, in the summer the software generates a brighter, more vibrant sound and in the winter a darker, denser one. The temperature data is not a metaphor; rather it directly connects the visual and auditory experience with the current natural energy of west Texas.

Quirk (for bass clarinet and computer) - Eric Honour

In much of the music I write, the title comes first and has tremendous impact on the resultant score. When I set out to write a piece for bass clarinet and computer, the word "quirk" came to mind. Something about the sound of it reminds me of the low notes of the bass clarinet, particularly when played with slap-tongue. Messrs. Merriam and Webster define "quirk" as "a peculiar trait." For me, the word always carries a further, slightly negative connotation, as if these idiosyncratic traits are just a little bit dirty – the sort of thing any decent person would keep under wraps. Nevertheless, as a composer, my quirks are an abiding love of groove and popular music, as well as an on-again, off-again romance with post-minimalist developmental techniques, and something of an infatuation with granular processing. The piece "Quirk" explores all of these in depth. It's just as well: the second definition of "quirk" is "a groove separating a bead or other molding from adjoining members." Clearly, even our lexicographers see the links between quirks and grooves.

Surveillance State - Kevin Olson

Well before Edward Snowden's revelations, the National Security Agency (NSA) sent an agent of

propaganda to my engineering school to proselytize the idea of a dire need for the government to be able to decrypt private communications; doing so would help our nation's ability to fight crime and increase security. After all, only criminals and terrorists would use encryption. The average citizen with nothing to hide should have nothing to fear. Half a lifetime later, and this visit still haunts my thoughts.

This piece delves into the ideas of surveillance by the state versus free will and rights of its citizens. Public domain recordings of Presidents George W. Bush and Barack Obama are used along with texts from FBI Director James Comey, Chief of Detectives for the Chicago Police Department John J. Escalante, and Adolf Hitler. These public statements advocating the need for surveillance are contrasted by the live saxophone performance, which is very open and improvised. The live electronics listen to the saxophone and respond. As the piece progresses, the originally obfuscated ideas are "decrypted," becoming clearer.

Note that as part of the audience, you are being recorded, and anything you say may become part of the performance.

Sitting 328b - Peter Hulen

In *Sitting 328b*, inspired by the ambient micro-sound piece "Null Drift" by Kim Cascone from his album *CathodeFlower* (Ritornell 1999), one can hear a diffuse background drone embellished by pitched bass, and a continuous, periodic foreground stream of dry, sinusoidal grains at eighth-tone intervals, occasionally punctuated by samples of high-frequency metallic scraping and indistinct speech. The guiding aesthetic concern was to create an ambient drone piece that was both repetitively 'industrial' and meditative at the same time.

a thing of dream and mist - Christopher Chandler

a thing of dream and mist was inspired by Conrad Aiken's poem "Nocturne of Remembered Spring," which deals with love, nostalgia, and the changing nature of memory. My intention was not to set this poem in a programmatic sense, but rather I sought to explore and respond to its rich atmosphere and vivid imagery.

Desert Song - Brian Kelly

Desert Song is based upon a collection of six poems I wrote after returning to my hometown of Phoenix, Arizona in the summer of 2013. It is during this summer that my 11-year-old niece, Kyla, died of an incurable brain tumor. The poems range in topic from the drive across the country from Georgia to her funeral, facing my own mortality, a questioning of the motives of an alleged god, and the trouble caused within the family as a result. All of these themes are set in front of the backdrop of the desert landscape, as the performer is set in front of a backdrop of desert scenery. As the poems are all overlapping and interconnected, the piece is formally one large, continuous wave separated into six sections, with thematic continuity between them.

Frayed Cities - Phillip Sink

Photographers love urban decay. We see endless images of ruins from cities like Detroit, Flint, and Gary. Once-charming downtown areas in many cities and towns have been boarded up and abandoned. Dying American towns and cities can either be the remnants of suburban flight, or the symptoms of a nation in decline.



In *Frayed Cities*, I wanted to explore images and sounds from dying cities. Using the idea of city planning and blueprints of buildings as a springboard into the video, I developed sketch drawings of people and cities. Through animating these sketches, I attempted to create an abstract narrative that explores the fact that there are no plans in place to reverse urban blight or aid the people who may be stuck living in these areas. With this in mind, I composed the music with sounds derived from crowds, construction/destruction, closing/opening doors, and other sources.

The Message - Julius Bucsis

The Message was inspired by the idea of humanity receiving a communication from an extraterrestrial civilization. The piece is constructed of frequencies corresponding to several mathematical constants including pi, Euler's number, and the square root of 2. It also utilizes the sequence of prime numbers and the golden ratio in its structure. The piece was composed in 2014 and was accepted into the Metanast MediaCityUK concert held in Salford, UK in September 2014, the New Horizons Music Festival 2014 held in Kirksville, Missouri in October, and the SEAMUS 2015 Conference held in Blacksburg, Virginia in March.

Paper Session 6: Music Today

2:30 PM - 3:30 PM, Newman Multipurpose Room

Hearing Electronic Voices: Discourse and Meaning through Contrapuntal Multimedia - Ryan Olivier

In this paper I will explore the heightened experience of metaphorical exchange through multimedia. The starting point will be the expansion of visual enhancement in electroacoustic compositions due to the widespread availability of projection in concert halls. With the use of visual representation comes the potential to map musical ideas onto visual signs, creating another level of musical cognition.

This paper will explore the current research surrounding metaphorical thematic recognition in electroacoustic works whose transformational processes might be unfamiliar, and which in turn create fertile ground for the negotiation of meaning. Jaroslaw Kapuscinski has sought to use multimedia as a means to enhance the concert experience, giving movement to the acousmatic presence in his electroacoustic work. In turn, his works create a concert experience that is more familiar to the 21st-century audience. Through examining Kapuscinski's recent work, *Oli's Dream*, in light of cognitive research by Zbikowski (1998 & 2002), topic theory by Agawu (1991 & 2009), and multimedia research by Cook (1998), I will propose a theory for analyzing contrapuntal meaning in multimedia concert works.

Panel Discussion: The Future of the Academic Electronic Music Studio in the Age of the Laptop - Russell Pinkston, Chair

Until fairly recently, students who were composing electroacoustic music were dependent upon their academic institutions to provide them with the necessary facilities – electronic music studios and computer music labs full of expensive hardware and software. With the advent of powerful and relatively inexpensive laptop computers and digital audio workstation software, however, the demand for these expensive academic facilities has dramatically decreased. Today's students tend to do their work at home, using their own computers and software, and composition students typically bring their laptops to their lessons and classes, making it easy to present their work-in-



progress. Considering that electronic music studios are so expensive to build and maintain, it seems inevitable that administrators will begin to question their relevance. Hence, it is important for those of us who direct such facilities to not only adapt quickly to the new paradigm, but also to clearly articulate the essential function they continue to serve. This panel discussion will address these issues from the perspectives of a number of major electronic music studio directors.

Concert 12

4:00 PM - 5:00 PM, Cube, Moss Arts Center

Quiet Arcs.....	Ricky Graham
Melodía sin melodía.....	Benjamin Whiting
Jorneta Stream.....	Chet Udell
The Art of Siphoning Souls.....	Christopher Poovey
Magic Fingers.....	Chi Wang
Wind Chimes Clatter through the Mist and Fog.....	Jon Fielder
Meridian.....	Edwin Huet

Quiet Arcs - Ricky Graham

"*Quiet Arcs*" is a live performance and fixed media piece for multichannel electric guitar and eight loudspeakers. This piece explores the notion of a dynamic pitch space and the bodily metaphors which underpin it. The guitarist's melodic choices are analyzed, scaled, and mapped in real-time to determine the spatial position and timbral shape of the multichannel live source relative to the accompanying drone-based tape part. Macro-level spatialization relationships between the 'stage' and 'arena' space frames are determined by the performer's larger body movements. The real-time instrumentation is largely improvised with the fixed media element providing a series of morphing pedal points as a basis for the improvisation. There will be an accompanying visualization of each audio channel within the pitch space, indicating spatial position, amplitude, and timbral shape over time.

Melodía sin melodía - Benjamin Whiting

This piece was born out of an inspiration of mine to blend sounds of found household objects, a staple of electroacoustic fixed-media composition, with those of an instrument associated with conventional means of Western music production, the transverse flute. Both sonic groupings carry with them certain implications that are challenged in this piece; at the start, the found objects and flute behave as they "should," but their respective roles blur as the piece progresses, eventually reaching a kind of cooperative unity by the end.

I wish to extend my sincerest gratitude to Melody Chua, whose contribution of samples of her brilliant playing formed the backbone of this piece.

Jorneta Stream - Chet Udell

"We shall exist as long as our stories are moist with our breath."
This phrase is from a Navajo folktale ending, and is from where this piece begins.



The Art of Siphoning Souls - Christopher Poovey

You are about to experience an aural representation of the sensation known to some as soul siphoning. If you are not familiar with the art of soul siphoning a more common term you may recognize is photography. This fixed media work will aurally simulate your soul as it travels within the depths of a Nikon F2 film camera. The simulation is in three parts: the capturing of a soul, the imprinting of a soul, and the loss of a soul. All samples used to create this simulation were authentically captured from a Nikon F2 camera.

Magic Fingers - Chi Wang

Magic Fingers is a multichannel interactive performance for the Leap Motion controller, customized software and the sound synthesis system. The Leap Motion reports various data streams, in this composition, the composer chose to use hands' and fingers' position in 3D space, distance between two hands and two fingers, then use those accessed data to modify synthesized and recorded sounds. Therefore, the interactive composition is performed with two hands' real-time actions. The hands' movements in the air and music expression create mysterious yet lively musical experience.

Wind Chimes Clatter through the Mist and Fog - Jon Fielder

Wind Chimes... is a piece originally conceived for an 8.1 acousmonium and was later reworked to be diffused in an 8.1 ring setup. The concept was originally to create a sense of lateral space and distance using the positioning of the speaker setup and combined with various reverb settings and mixes. The general affect is that of listening to various wooden and metal chimes on top of a bed of resonant drones and chords.

After finishing the original version I decided to rework the piece and adapt it for an 8-channel ring setup to fully immerse the listener in the sound world and create an entirely different listening experience and use of physical space. That is the version presented here.

Meridian - Edwin Huet

This textural work explores aspects of creation, development, and destruction through interactions of opposing sound worlds that represent a mix of cataclysmic grandeur and chaotic particle collisions. Abstract timbral illustrations of dynamic elemental processes on cosmic and sub-atomic levels encompass listeners in a tempestuous sonic environment.

SEAMUS Meeting

5:00 PM - 6:00 PM, Cube, Moss Arts Center

ICAT Facilities Tour

6:00 PM - 6:30 PM, ICAT, Moss Arts Center



Concert 13

7:30 PM - 9:30 PM, Anne and Ellen Fife Theatre, Moss Arts Center

The Syntax of Chaos.....	Sylvia Pengilly
A Robot for a Friend.....	Ryan Carter
	Kelly Sulick (flute)
Voice of Thunder.....	Kyle Shaw
Studies in Momentum.....	Peter Van Zandt Lane
	Keith Kirchoff (piano, electronics)
Blind The world where I can't be but you live in: Michi ni niji ~ Higure.....	Akiko Hatakeyama
	Akiko Hatakeyama (voice, electronics)
The Seventh Seal.....	Joshua Harris
	Ursula Kuhar (mezzo-soprano), Anna Billias (piano)
Accretion Flows.....	John Thompson
utuquq.....	christopher jette
All That Glitters and Goes Bump in the Night.....	Linda Antas
rising.....	Paul Botelho

The Syntax of Chaos - Sylvia Pengilly

How can Chaos have syntax? That's ridiculous! This may well be your reaction to the title of this piece, however, in a scientific context, Chaos, with reference to Chaos Theory, refers to an apparent lack of order in a system that nevertheless obeys particular laws or rules known as sensitive dependence upon initial conditions.

To apply these ideas, samples were selected that were as different from each other as I could imagine; snippets from an early string quartet, a short, quasi-modal exercise designed to test my student's music reading ability, and some percussive, granular sounds. These were then processed several times until they sounded nothing like the originals. Then, beginning with the chaotic distortions, the piece slowly unfolds to reveal the samples in their original form, the "initial conditions" from which the "Chaos" emerged.

In an attempt to integrate music and video, jpeg images were made of the actual waveform of each sample, and this image was used as the basis for each short video clip. Additionally, the music was incorporated into the animation algorithm in such a way that it has an effect on how the image moves. Thus, the music contributes to both the geometry and the motion of the piece.

A Robot for a Friend - Ryan Carter

A Robot for a Friend is inspired by an experience I had searching for music for flute and electronics on Spotify, where I came across an ambiguously presented *Passacaglia for flute and tape*, for which no composer was listed. I tried to find the missing information by locating the same album on



iTunes, which did attribute the work to a particular composer: Muzio Clementi. Fairly certain that a piece of electronic music was not produced by an 18th-century composer, I appealed to Facebook, where one of my friends suggested that the work may have been created by 20th-century composer Aldo Clementi (which it was). In this score, the term “robot” does not refer to a human-shaped metal object that walks and talks. Instead, it refers to the algorithms that extract features from sound, select what information to display, and suggest what music we should listen to. I have a mostly friendly relationship with these robots, but sometimes they lie.

Voice of Thunder - Kyle Shaw

A Google search of this piece’s title reveals that it may refer to a Prince Far I’s 1981 reggae album, Mirka Breen’s 2012 novel, or an old syncretism between Canaanite and Jewish modes of referring to deity. Feel free to hear a slice of each into the piece.

Studies in Momentum - Peter Van Zandt Lane

Studies in Momentum is a cycle of five miniatures for piano and live electronics, composed for pianist Keith Kirchoff. The piece is modeled as four études and a fantasy, with the focus of each étude being a single kind of signal process: harmonization, downsampling, ring modulation, and delay (respectively). The closing fantasy, approaching entropy, combines the four while also including a kind of hyper-rhythmic, EDM-esque *musique concrète* element that I often return to in my electroacoustic works. The titles –*ground state; projectile motion; escape velocity; Planck’s waltz, and approaching entropy*– give each étude’s narrative a particular challenge, or a tension between where the music is going and how it gets there, with thematic elements inspired by the type of signal process itself. These concepts – borrowed concepts of quantum mechanics and kinematics– are areas in which I have absolutely no authority (which is probably what makes them inspiring). But like many other composers, I find layperson-gearred writings on physics highly evocative, sparking exciting ideas about relationships between musical narrative and motion in the physical world.

Blind | The world where I can’t be but you live in Michi ni niji ~ Higure - Akiko Hatakeyama

I saw an oil mark on a black pavement near my apartment. The sunlight made it iridescently shine, and seeing it sent me back to the time when I was a child. I was too small to know what the rainbow things on the pavement were, but they mesmerized me.

Blind is made of two sections: *Michi ni niji* (Rainbow on a street) and *Higure* (Sunset). Together, the piece represents life and memories, a psychological and philosophical investigation on my current and past. In *Michi ni niji*, the action of pulling thread from the custom instrument “Hako” is a metaphor of how retrieving memories works – sometimes difficult to recall and sometimes unstoppable of the memory flow. *Higure* conveys the feelings of later life. The mortal nature of the world and my relief at being surrounded by and yet able to escape from memories (thread on the floor) are also shown.

The Seventh Seal - Joshua Harris

Ingmar Bergman’s 1957 film *The Seventh Seal* has many evocative and memorable images, but perhaps what is most striking is that its modernist themes are set in medieval Europe. This song is inspired in part by the film’s juxtaposition of the old and new. Here the old is represented by ancient Greek text set to chant-like melodies and the new is represented by various contemporary piano and computer music techniques.



Text (from Revelation 8:1-2):

Καὶ ὅταν ἤνοιξεν τὴν σφραγίδα τὴν ἑβδόμην,
ἐγένετο σιγή ἐν τῷ οὐρανῷ ὡς ἡμίωρον. Καὶ εἶδον
τοὺς ἑπτὰ ἀγγέλους οἱ ἐνώπιον τοῦ θεοῦ ἑστηκασιν,
καὶ ἔδοθησαν αὐτοῖς ἑπτὰ σαλπιγγεῖς.

And when he had opened the seventh seal, there was silence in heaven about the space of half an hour. And I saw the seven angels which stood before God; and to them were given seven trumpets.

Accretion Flows - John Thompson

Accretion flows presents a tightly couple relationship between audio and the visual elements. This coupling is accomplished by allowing an underlying system to act as the substrate from which is medium will grow. In *accretion flows*, audio and visual particles are created and directed within a gravitational system. The composition is the organized sequencing and layering of these patterns and orbits.

utuquq - christopher jette

The topographical arc of piano material (left hand only) is drawn from the ridge line of Mt. Huntington, part of the White Mountains in New Hampshire. This piano cell is repeated and unpacked over the course of the work. The right hand sculpts a complimentary electronic sound world controlling the electronics via a kinect sensor. In conjunction with synthesis, a recording of walrus made at Round Island Alaska (closed as of September 2014) is used as the basis for waveshaping. Akin to the unpacking of the piano material, the electronics evolve, increasingly probing layers and components of the sound mass. The break up of both the piano and electronic material over the course of the piece occur on different timescales. The processes both reflect an aesthetic point of departure. The piano unfolds in a very linear, if edited, method. The electronics evolve in an irregular fashion, expanding and contracting in a manner that suggests an external force, both unpredictable and irregular. The final statement posits an intertwined ebb and flow.

All That Glitters and Goes Bump in the Night - Linda Antas

All that glitters isn’t treasure—but it glitters nonetheless; not everything that goes bump in the night does us harm; and most things are nearly equal parts “glitter” and “bump”. Negative things often carry an equal measure of good, if only we deal with them in constructive ways. Faulty logic, ignorance, and strong emotion can inhibit our understanding of the people, objects, and situations around us, causing undue negativity, unfounded positivity, and overall confusion about the causes of both happiness and suffering. This work is a reflection on appearance vs. reality—on our often distorted perceptions of good and bad, success and failure, direct cause and serendipity—and on all manner of assumptions.

rising - Paul Botelho

rising (2014) reflects upon struggle and its ultimate transcension weaving a narrative of denial, confrontation, acceptance, loss, and rebirth. The work features performed voice accompanied by fixed media. The piece is dedicated to composer Steven Miller and his courageous battle with ALS. As an educator, Miller introduced me to the world of electro-acoustic music nurturing and inspiring me as a young composer.



Concert 14

10:00 PM - 11:30 PM, Theatre 101

Catapult - For Alto Saxophone and Interactive Electronics.....	Justin Porter Susan Summers (alto saxophone)
Decoherence.....	Christopher Biggs Samuel Wells (trumpet)
Steel/Spruce.....	Jake Whitecar (nagual/tonal).....
Norman whispers.....	Conor Grace Kyriakos Tsoukalas
Hyperions.....	Paul Turowski Kevin Davis (cello)
moDernisT.....	Ryan Maguire
Thrown Glass.....	Keith Kothman Keith Kothman (laptop)

Catapult - For Alto Saxophone and Interactive Electronics - Justin Porter

Like a high energy projectile shooting across the sky, *Catapult* is structured around a series of sweeping upwards gestures and several harmonic progressions that travel many distances. With the saxophone and electronics venturing through a myriad of sound worlds and textures throughout their journey, the two fly through into distant lands, interacting with each other until the piece breaks down at the end of the projectiles path, in an unknown territory far away.

Decoherence - Christopher Biggs

Decoherence is dedicated to Samuel Wells and was commissioned by a consortium consisting of Samuel Wells, Aaron Hodgson, Scott Thornburg, and the UMKC Trumpet Studio. The work abstractly reflects on the phenomena in quantum physics and a possible explanation for the phenomena. Decoherence is a phenomena whereby particles that have probable locations always take on a specific location when observed by a human. This is represented through the presentations of hundreds of possible ways to a play a single pitch on the trumpet followed by the performer's decision to play the pitch in a specific manner. Also, when the performer is making a decision about what to play, they become part of the video. One possible explanation for how probable locations collapse into a specific location is that all probable locations come to exist in their own parallel universe upon observation. This mirrors a philosophical notion of parallel universes whereby each time a person makes a decision the universe fractures into multiple parallel worlds. As the work progresses the trumpet player has less and less freedom as the specific universe they inhabit becomes increasingly defined by the past decisions.

Steel/Spruce - Jake Whitecar

Steel/Spruce is constructed entirely from the sounds of an acoustic guitar. Some samples are clearly recognizable, while others have been twisted, chopped, and cycled by various synthesizers. This continuity of source material produces a beautiful variety of percussive thumps and twangs, and lush chords and pads, all colored by the two primary materials represented by the instrument.

Norman whispers - Kyriakos Tsoukalas

Urban sounds surround us. Sometimes, we take a moment to whistle back, embellishing mechanical rhythms.

Hyperions - Paul Turowski

Hyperions features an animated digital score that combines elements of traditional musical composition with the dynamic quality of video games to create an interactive context for musical improvisation. Real-time performance decisions about pitch, timing and activity level are recognized by the computer via microphone input and influence a physics-based game world. Collisions within this game world act as triggers for the playback and processing of sounds recorded during performance. Chance-based factors, including interactions with non-playable characters (NPCs), allow unique visual and sonic patterns to emerge with each performance.

moDernisT - Ryan Maguire

Popular songs play a central role in the emotional life of global culture. Songs are a part of our collective consciousness, are fused with our memories, and are embedded in our technologies. For example, the songs "*Tom's Diner*" and "*Fast Car*" were used to test and develop the MP3 format, and thus, in a sense, all songs encoded as MP3's owe a part of their sound to this cultural legacy.

Based on models of human audio-visual perception, lossy compression codecs significantly reduce file sizes by removing information deemed perceptually unavailable to the end user. When encoding material in such a format, information from the original signal is deleted. We accept this because the end result is sufficient for our uses, but what does the information which these codecs delete sound and look like? How does this material relate to our memories of the original songs and the emotions these songs invoke? In the work presented here, I develop and employ techniques to recover these lost sounds and images and reformulate them as art.

In particular, *moDernisT* was created by salvaging the audio lost to mp3 compression from the song "*Tom's Diner*". Here we find the form of the song intact, but the details are fragile remnants of the original, playing at the border of intelligibility, memory, and affect. Similarly, the accompanying video contains only material which was erased during mp4 compression.

Thrown Glass - Keith Kothman

Thrown Glass explores a soundscape of broken glass in a live-performance environment using Max. The work is a companion to *Bent Metal*, sharing its software performance environment and general processing, and exploring sounds related by physical material and method of sound production.



Installations

Salt Marsh Suite

Carol Burch-Brown, Ann Kilkelly, and Tohm Judson

Moss Arts Center, Experience Studio

Salt Marsh Suite is an installation featuring imagery, sound, and data collected over five years from a coastal estuary, Bird Island, near Sunset Beach, NC. The piece visually and sonically evokes four elevations of the marsh: underwater, surface, grass and mudflat, and sky. The sound environment contains recorded sound and synthesized versions of water animals, birds, and insects.

Environmental data includes temperature, wind speed, humidity, tidal stream speed, elevation, and directional currents. Real-time data, distributed visually and sonically by Max, evokes a naturalistic, yet heightened sense of the salt marsh environment. Imagery drawn from plants, animals, tides and terrain are transformed across layered materials and textures, including topographical data obtained from onsite 3D laser scanning of a tidal streambed. Original field recordings include rarely heard rhythmic patterns made by fiddler crabs, inaudible without amplification. The piece includes hydro-phonic recordings of oysters and other sound producing underwater animals. *Salt Marsh Suite* is both installation and dance. A dance performance of the piece will take place during the SEAMUS conference, directed by choreographer and dancer Ann Kilkelly, Professor of Theater at Virginia Tech. The video editor for *Salt Marsh Suite* is Joan Grossman, independent filmmaker in Brooklyn, NY.

#Carbonfeed

Jon Bellona and John Park

Moss Arts Center, Cube Hallway

With the advent of social media like Facebook, Twitter, and Instagram, humans have increased their production of digital content. Even simple online interactions generate carbon emissions; a Google search has been estimated to generate 0.2 grams of CO₂. To keep pace with growing online media, there is an increasing dependence upon data centers, which now account for 2% of the US's electricity consumption.

#CarbonFeed directly challenges the popular notion that virtuality is disconnected from reality. Through sonifying Twitter feeds and correlating individual tweets with a physical, data visualization in public spaces, *#Carbonfeed* invites viewers to hear and see the environmental cost of online behavior and its supportive physical infrastructure.

#CarbonFeed works by taking in real-time tweets from Twitter users around the world. Based on a customizable set of hashtags, the work listens for specific tweets. The content of these incoming tweets generates a real-time sonic composition. An installation-based visual counterpart of compressed air being pumped through tubes of water further provides a physical manifestation of each tweet.



The Collected Works of Ferin Martino as Conjured by Your Presence

Jeff Morris

Moss Arts Center, Fife Balcony Lobby

Ferin Martino is a playful collaborative pianist: move in engagement with the music, and use the trackpad to suggest melodies to incorporate. But if you try to take too much control or if you're boring, Ferin may bore of you and entertain itself instead!

Since this software algorithm is capable of generating its own body of work, I was moved to give it an anthropomorphic name, Ferin Martino. In this installation, motion of the viewers, as seen by the computer's video camera, influences the intensity of the music created. This creates a situation that lets us reflect on the ontological nature of the music: this music cannot be heard without the audience causing changes in the composition; there can be no "definitive version." By extension, it offers a chance to reflect on the way that any composer's music only has its existence in the minds of its audiences, and that the modes of its existence may be as diverse as its listeners. This work consists entirely of software and can generate new material practically indefinitely. The fact that the code fits on one screen indicates the elegance of the approach to generating endless music with pleasing results.

Interactive Soundscape Environment (InSeE)

Tae Hong Park, Michael Musick, Samuel Mindlin, Andrew Phillips, Gemma Peacocke, Torin Geller, and Matthew Lau

Moss Arts Center, Fife Mezzanine Lobby

One of the first electro-acoustic music (EAM) works composed by the lead artist of this installation proposal was based on the idea of expressing emotion using sonic media. This EAM work was the outcome of a graduate composition seminar that posed a seemingly simple yet rather difficult challenge - viz., making emotion the theme of a composition. The guiding strategy was to focus on expressing emotion through the lens of a shared human experience - that of motherhood. This etude not only led to a companion multichannel piece about "fathers" but also led (unbeknownst to the composer at that time) to the development of capturing emotion through various modes of "composition vs. documentation" while simultaneously - and constantly throughout the compositional process - negotiating one's role as the composer vs. reporter. Compositional strategies, aesthetics, and techniques that began as an compositional exercise in expressing emotion with an emphasis on samples from interviews, further developed and expanded to the vast area of soundscape composition. In one of these early soundscape compositions, the main conceptual goal was to capture childhood sonic memories of a given space (viz., the city of Vienna, Austria) experienced some 30 years ago by: (1) re-visiting the city for one month, (2) recording its soundscapes and capturing its spatio-acoustic idiosyncrasies, (3) developing a sonic soundscape scenes driven by remembered sonic nostalgia of childhood and sonic experiences as an adult, and (4) ultimately composing an EAM work that encoded the sono- emotional essence of this old European city.

Interactive Soundscape Environment (InSeE) a collaborative project that explores emotion, sound objects, spatio-acoustic sonic idiosyncrasies, and narrative sound art. In particular, the proposal specifically aims to fold-in interactivity and real-time technologies within a soundscape framework and metaphor for the exploration of: (1) idiosyncrasies of soundscapes and the concept of



geophony; (2) spatio-acoustic sonification strategies; (3) musical exploration of soundscapes: raw, unaltered states, modulated states, and entirely synthesized states; (4) real-time interaction; and (5) exploitation of the Citygram system. The postulation of the work is the existence of locative sonic characteristics as articulated in the piece about Vienna, and that such characteristics will provide an environment for emotional engagement, some shared, some random, and others completely imagined. InSeEe is driven by locative soundscape audio signals, low-level soundscape feature vectors, and data-driven sound synthesis strategies streamed from three locations – New York City in New York, Blacksburg in Virginia, and Prague in the Czech Republic. We aim to explore this sono-perceptual space driven by raw sounds, sonification strategies, and locative sound icons through an interactive sound installation.

Father's Dream Reliquary

Douglas Geers

XYZ Gallery, Room A

Father's Dream Reliquary is an interactive installation housed in the body of a vintage 1940s wooden radio. The work is intended to address issues of memory, ephemerality, and intimate engagement versus mass communication—in particular commercial radio's introduction of real time, one-way broadcasts to human culture, and its placement in home spaces.

This work consists of a vintage radio body housing an Arduino microcontroller, secondary audio electronics, and speaker, fixed atop a black plastic base housing an ultrasonic sensor. The Arduino microcontroller is connected to an audio shield capable of playing the approximately 150 audio clips designed expressly for the work. The choice of when to make sound and what sounds to play is dependent upon data from the ultrasonic sensor, which reads the proximity of gallery patrons. Nearly all choices are made according to changing weighted probabilities, and thus the actual sequence of sounds is unique for each viewer/listener's encounter with it.

The ultrasonic sensor gauges the distance of visitors to the piece and changes its behavior based on this information. When no one is present, it falls silent. As listeners enter its vicinity, it 'comes to life,' playing a shifting texture of radio static punctuated by silences. As one moves closer the radio alternates between radio static, silence, and moments from the first "fireside chat" delivered by United States President Franklin Delano Roosevelt in March, 1933. Even closer, the sound materials begin to include personal recordings of my late father playing with his grandchildren. When one is quite close, all sounds drop away except those of my father's voice, with a focus on small phrases and an alternating closeness and distance of his vo

Ghost in the Codec

Ryan Maguire

XYZ Gallery, Room B

Ghost in the Codec is an installation that creates tangible, aesthetic forms out of the material usually lost to compression. Lossy compression codecs such as MP3, JPEG, and MPEG-4 erase information based on models of human audio-visual perception. This erased material seems to be formless, as there is an illusion that it simply disappears. This is, however, not the case—there is a great deal of meaningful, even emotional affecting, information in this deleted data. In this project, I present users with the chance to experience sounds, pictures, and moving images that are deleted from familiar cultural material. We can hear the material deleted from our favorite songs



when they are encoded from lossless audio into MP3, see the deleted material from familiar videos when they are uploaded to YouTube, and print the deleted material from familiar images when they are uploaded to Wikipedia. Via a computer interface, users are able to compare uncompressed and compressed audio and video files and then are able to listen to or watch a newly created file composed of the difference between the two - the ghost in the codec. Finally users can create a variety of images both compressed and uncompressed and print a newly created image of the difference to print, giving this previously lost material a new form and tangibility.

Meditation on Form and Measure

Steve Wanna

XYZ Gallery, Rooms C & D

Meditation on Form and Measure aims to create an immersive and meditative sonic environment, that also allows for the potential for active visitor participation. The primary source material consists of recordings of various text materials (poems, short plays, etc) and simple sinusoidal tones. The title of the installation is the title of one of the poems I used for source material, a poem by Charles Wright.

The selected texts were chosen for their evocative nature (imagery, sound, etc). The recorded text is broken up into fragments of different durations, ranging from single words to sentences lasting up to 10 seconds. A Max/MSP patch that utilizes principles of cellular automata cycles through the files randomly and plays them over 5 speakers placed around a room. It also simultaneously generates sine tones that create an undulating texture with limited variation, which serves as a sonic theatre for the text fragments to interact on. As the words and sentences mingle in unexpected and unpredictable ways, new sonic and syntactic intersections arise. The iterations of the generations of the cellular automata are all assigned equal duration (10 seconds), which gives the installation a regular pulse and overall order that juxtaposes the potential internal irregularity and occasional chaos of each iteration. This regularity also lends the installation a meditative, almost hypnotic quality that allows the listeners to immerse themselves in its varying sonorities.

The installation is set up in a closed room with dim lights. Participants may stand or sit and simply listen for a while. The iterative and generative nature of the form permits participants to come and go as they please. There is, however, an added level of interaction. The installation has an optional aspect that allows for listeners to engage with the installation by contributing their own voice. Listeners have the opportunity to record their voice to add to the pool of sound files that are available for Max. Listeners wishing to participate can draw from a stack of cards, each with a prompt on it (ex.: answer a question, think of a favorite word, read a printed line, etc), then, following a few, simple instructions, they can record their voice into the computer. The patch is designed to add those files to the same directory, and they become part of what is played back on the speakers. Given a long period of time, this has the potential to drastically change the syntactic and sonic landscape of the installation.

As above, so below

Stephen Dydo and Susan Haire

XYZ Gallery, Room E

As Above so Below is a sculpture with embedded audio. The sculpture is made of four suspended layers, partially obscuring a layer of photographs. The audio is six channels spread out across the



sculpture, playing a looped 40-minute computer generated electronic composition. The theme of the installation is transformation, as represented by alchemy.

“That which is Below corresponds to that which is Above, and that which is Above corresponds to that which is Below, to accomplish the miracle of the One Thing.” This is the second statement taken from the Emerald Tablet, attributed to Hermes Tresmegistus, cherished in secret by philosophers and alchemists since about 800 CE. The underlying meaning, that everything which happens in one level of the universe happens in an interconnected fashion in every other, is what has motivated the artists in this installation.

A significant feature of alchemy is the notion that the spiritual transformation of the alchemist was an essential element in the process; this has been an increasingly important part of our work as well. Art and music are like alchemy. Both the alchemist and the artist/composer (and, later, the performers and the audience) are ideally involved in a process of self-transformation. The transmutation of the elements, just like the creation of musical pieces, is a process that makes the transformation possible. The transformation of a work of art by music, or of music by a work of art, is also a similar process. So the music of this installation is itself involved in a self-transformation; the initial musical source material was written by the 17th century alchemist Michael Maier in his work *Atalanta Fugiens* (1618). This book contains fifty illustrations, each of which is accompanied by a short epigram, a longer essay, and a three-part musical score – the first multimedia work.

The musical part of the installation is entirely based on the short musical pieces—called fugae—included in *Atalanta Fugiens*. These pieces, each around two-dozen beats in length, are all of the form of two imitative tunes written over a common melody, or ground, which recurs in each of the fifty pieces. The style of the music seems at first very conventional and conservative music for its time; but one quickly becomes aware of some terrible mistakes; parallel fifths, leaps of a tritone, lines spanning a diminished octave, etc. Such errors would have been made only by the rankest beginner; but the imitative counterpoint is otherwise quite accomplished and assured. This leaves one with the suspicion that the ‘errors’ were intentional, sending some message to us which is no longer clear.

The transformations of these pieces in the installation involves treating the original fugae as a kind of prima materia, the life-force, the seed of alchemical process. Each fuga was transcribed into modern notation and entered into the computer, and was then extruded through nine separate processes, roughly corresponding to subdivisions of nigredo, albedo, and rubedo stages delineated by the early alchemists. In the music, each of the processes involves a series of internal transformations modeled on the sounds of natural language, which itself can be seen as a constantly transforming stream of air. But the sound materials used in the different stages are radically different. Thus some transformations have the sounds of some language which you don’t quite understand, while others are completely inhuman, alien.

The visual element of this work was originally inspired by scum on a river that can be seen in these photographs, human effluent transmuted into heavenly visions of constellations following alchemists of the Silent Tradition who worked with rejected and worthless substances like dirt, sea foam, dew, brackish water and urine. For example urine was an ingredient in gold compounds used for medical treatments. (Take the urine of a healthy man drinking wine moderately; put it into a gourd which you must stop close, and set into horse dung for the space of forty days. From Dr Anthony’s Aurum Potabile – DW Hauck.)



By recycling waste materials into the work *As Above so Below* reflects the alchemical processes of nigredo, albedo and rubedo representing these stages with chopped-up old black rubber gloves, about 100 white plastic milk bottles (commonly used in the UK) and wire plaited with strips of red plastic carrier-bags or bound with red insulating tape. Nine alchemical symbols including sulphur, quicksilver, purification, reduction and distillation are contained within the shapes of this red wire. The nets from Rioja bottles represent gold and are in the form of an inverted triangle, the alchemical symbol for water relating to the river in the photographs, the beginning of this work. With gold as the ultimate goal the circle is completed and the end is the beginning.

The tangled mesh-like qualities, in both the sculpture and the photographs, express the interconnectedness of that which is above to that which is below and alongside the celestial scum are photographs of fragments of off-cuts such as wire, string, cable ties and acrylic drillings from the artist’s studio, saved for no particular reason over the last three years. There are also photographs of the work itself signifying the enfolding of the work in upon itself like nesting Russian Dolls. This articulates the idea that everything contains everything else, a common thread in our work, which is reflected in alchemy. The alchemists thought that the prima materia existed in all matter and it was this seed that enabled matter to be transmuted into gold. Alchemists believed that all matter was alive and had the potential for growth and change.



Listening Rooms

Perform Studio, Moss Arts Center

Stadluft Macht Frei (the city air makes you free).....	Orlando Garcia
Hunger Dreams in Flocks.....	Hunter Ewen
Seeing the Past Through the Prism of Tomorrow.....	Keith Kirchoff
Nova Vita.....	Ryan Olivier
Aqueous.....	Clay Allen
Tender Spirit I.....	Kyong Mee Choi
Trapped by Polygons.....	David McDonnell
Wild Arc.....	Lee Weisert
C10H14N2.....	Sunglae Park
Junk Jam.....	Ramon Castillo
tingting.....	Vladimir Smirnov
Jungles: Remix.....	Caroline Miller
A Driving Figure.....	Jonathan Wilson
Neon Rush.....	Brian Sears
Windows Left Open.....	Sean Peuquet
The Laws of Nature.....	Ian Clarke
Sketches of Chauvin (Waltz & Two-Step).....	Trey Duplantier
Nexus.....	Mitch Weakley

DISIS Lab, Newman Library

Triptych: Three Studies in Gesture and Noise.....	William Price
Sliced Attractor.....	Paul Schuette
Wanderings, for clarinet and computer.....	Kyle Rowan
Utterings.....	Evan Williams
START.....	Robin Cox
lullaby for morning.....	Aurie Hsu
Ricochet Orbit.....	Jason Mitchell
Time, for flute and interactive electronics.....	Ryan Woodward
Shadows of the Electric Moon.....	Per Bloland
Phyllotaxis.....	Jennifer Merkwowitz
Omega.....	Cody Brookshire
Impulse/Repulse.....	Mitchell Herrmann
INTRA II, for viola and electronics.....	Yoon-Ji Lee
Party Music.....	Devin Maxwell
Bolgia.....	Deovides Reyes III
Eroding Mountains.....	Scott Barton



Biographies

Sang Mi Ahn

Sang Mi Ahn is a composer whose blend of electronic and acoustic works have garnered numerous international awards. Her recent awards include winner of the 2014 Indiana University Dean's Prize in Composition, the 2013 Heckscher Composition Prize, the 31st Republic of Korea Composition Prize, the Judith Lang Zaimont Prize at the 2013 Competition of The International Alliance for Women in Music, and winner of the 2011 Women Composers Festival of Hartford International Composition Competition. Her compositions have been featured in festivals and conferences across the United States as well as in Europe and Asia—at the International Trumpet Guild Conference, the International Computer Music Conference, the Australasian Computer Music Conference, Symposium on Acoustic Ecology, and at the North American Saxophone Alliance Biennial Conference. Ahn completed a Doctor of Music in Composition from Indiana University, where she also earned her Master of Music in Composition and served as an Associate Instructor in Music Theory.

Clay Allen

Originally from Ruidoso, New Mexico, Clay Allen is an American composer and pianist currently studying composition at the University of North Texas with Kirsten Broberg, Andrew May, and Joseph Klein. Clay's output includes works in a variety of styles for large and small ensembles, as well as fixed media. His compositions have been performed across the United States and internationally at festivals including SEAMUS, CICTeM in Buenos Aires, the Cortona Sessions in Italy, and the New York City Electroacoustic Music Festival. In addition to composing, Clay is active as a performer, teacher, and arranger.

Aaron Anderson

Aaron Anderson completed his bachelor degrees at Ball State University in Music Technology and Music Composition under the tutelage of Keith Kothman, Michael Olson, and Michael Pounds. Aaron has had works presented at SEAMUS (2013), Electronic

Music Midwest (2013), The Electroacoustic Barn Dance (2013, 2014), Threshold (2012, 2014), N_SEME (2014, 2015) and Root Signals (2014). In the fall of 2014, he began his MM in Music Technology at Georgia Southern University under the direction of John Thompson.

Jon Anderson

Jon Anderson (DMA, University of North Texas; MM, University of North Carolina at Greensboro; BA, Luther College) is Assistant Professor of Music at Wayne State University in Detroit MI. He teaches composition and theory courses, and composes for a variety of acoustic and electroacoustic mediums.

Linda Antas

Linda Antas is a composer, arts technologist, flutist, and educator. Her works have appeared on festivals including the International Computer Music Conference (ICMC), the Society for Electroacoustic Music in the United States (SEAMUS), the Città di Udine International Composition Competition (Taukay Edizioni Musicali), the Sound and Music Computing Conference, and the Fifth International Congress on Synesthesia: Science and Art. She has been recognized by the Musica Nova International Competition of Electroacoustic Music, the Fulbright Foundation, the Bourges Electroacoustic Composition Competition, and has received commissions from the International Computer Music Association and various internationally-renowned performers. She regularly collaborates with visual and sound artists and scientists for creative and educational projects. Her current research involves audiovisual works, real-time signal processing, and physical computing. Antas teaches music technology, interdisciplinary multimedia courses, and composition at Montana State University and is currently Vice President for Membership of SEAMUS. Her acoustic and electroacoustic works are published on the Ablaze, TauKay, Centaur, EMS, and Media Café labels. In addition to (and sometimes in combination with) musical activities, she spends time in the wilderness and practices Buddhism.



Nathan Asman

Nathan is a musician, composer, and music technologist. His musical and artistic endeavors reside mainly within the electronic/digital realm, where he specializes in data-driven instruments and sound generation. Focusing on the intersection of popular and academic music, he strives to unite the two musical styles utilizing the endless musical and artistic opportunities afforded him by the world of music technology and computer-based music. His goal is to apply his knowledge and skills to further the field of music technology and produce music that can be appreciated by both the academic and casual listeners. Nathan received his M.Mus in Intermedia Music Technology from the University of Oregon, and his B.A. in music (with an emphasis in music history) from Denison University. He is now pursuing his D.M.A. in Data-Driven Instruments at the University of Oregon under the direction of Dr. Jeffrey Stolet and Dr. Chet Udell.

Curtis Bahn

Curtis Bahn is an improvising composer involved in relationships of body, gesture, technology and sound. He holds a PhD in music composition from Princeton University, and studies Hindustani classical music as a formal disciple of acclaimed sitarist, Ustad Shahid Parvez Khan. He has taught at Columbia University, Brown, NYU, Princeton and CUNY. His music has been presented internationally at venues including Lincoln Center, Sadler's Wells - London, Palais Garnier - Paris, Grand Theatre de la Ville - Luxembourg, as well as numerous festivals, small clubs and academic conferences. He has worked with the Trisha Brown and Merce Cunningham Dance Companies. Curtis recently was named the "Ralph Samuelson fellow" through the Asian Cultural Council, receiving a grant to study and collaborate with artists in India. Curtis is Assoc. Prof. and Graduate Program Director for the Arts at Rensselaer Polytechnic Institute in Troy New York

Christopher Bailey

Born outside of Philadelphia, PA, Christopher Bailey turned to music composition in his late 'teens, and to electroacoustic composition during his studies at the Eastman School of Music, and later at Columbia University. He is currently based in Boston, but

frequently participates in musical events in New York City. His music explores a variety of musical threads, including microtonality, acousmatic and concrete sounds, serialist junk sculpture, music in flat forms and its consequences, and constrained improvisation.

Scott Barton

Scott Barton is an Assistant Professor of Music at Worcester Polytechnic Institute who composes, performs, and produces (electro)(acoustic) music. His interests include rhythm, auditory and temporal perception, musical robotics, and audio production. As a researcher, programmer, and author, he has collaborated with the Kubovy Perception Lab at U.Va. on psychological experiments involving rhythm perception. He founded and directs the Music, Perception and Robotics lab at WPI, which develops robotic musical instruments and software that enables human-robot musical interaction. He co-founded EMMI, a collective that designs, builds and performs with robotic musical instruments. He studied music and philosophy at Colgate University, received his Master of Music in Composition from the Brooklyn College Conservatory of Music, and completed his Ph.D. in the composition and computer technologies program at the University of Virginia. His music has been performed throughout the world including at SMC; ICMC; CMMR; NIME; and the Leeds IFIMPaC. scottbarton.info

Stephen Beck

Stephen David Beck is the Derryl & Helen Haymon Professor of Music at the LSU School of Music and holds a joint appointment with LSU's Center for Computation & Technology (CCT) in the Cultural Computing focus area. He received his PhD in music composition and theory from the University of California, Los Angeles, in 1988, and held a Fulbright Fellowship in 1985-86, where he was a researcher at the Institut de Recherche et Coordination Acoustique/Musique in Paris, France. Having joined the CCT in 2003, he served as Interim Director of the center from 2008-2010 and was director of the AVATAR Initiative 2007-2012. His current research includes sound diffusion systems, high-performance computing applications in music, music interaction with alternative interfaces, music software for laptops and mobile devices, and



virtual music instruments, a system of interactive computer programs that extend and expand on the performance capabilities of acoustic instruments.

Halim Beere

Halim Beere's compositions explore the three intersecting worlds of purely instrumental, fixed media, and real-time computer generated music. He received his Master's and Doctor of Musical Arts in composition at the University of Illinois where his teachers included Mei-Fang Lin, Erik Lund, Stephen Taylor, Heinrich Taube, and Scott A. Wyatt. His works have been performed at SEAMUS national conferences and Electronic Music Midwest. Recordings can be found on *Measures of Change* and *Transient Images*, both released by the University of Illinois, SEAMUS series volume 23, and *Invisible Seams* released by the saxophone duet Ogni Suono.

Beere is also a programmer, and his doctoral research in live coding entailed the creation of a live coding instrument built in Common Music and Supercollider. With founder Professor Taube, Beere helped form *Illi*ac Software, Inc. where he is currently on the team developing *Harmonia*, a software for automated music theory pedagogy.

Jon Bellona

Jon Bellona is an intermedia artist specializing in digital technologies. <http://jpbellona.com>

Jon's work explores data-driven control of music, electronic performance using alternate controllers, and developing interdisciplinary collaborations that explore how sound/music deepens our understanding of the world around us.

Jon's music and intermedia work have been shown internationally including KISS (Kyma International Sound Symposium); SEAMUS (Society for Electro-Acoustic Music in the United States); IMAC (Interactive Media Arts Conference); SLEO (Symposium on Laptop Ensembles and Orchestras); with special performances at the Casa da Musica (Porto, Portugal) and CCRMA (Palo Alto, CA).

Jon is currently working towards a Ph.D. in Music at the University of Virginia and is part of

the art collective, Harmonic Laboratory (<http://harmoniclab.org>).

Edgar Berdahl

Edgar Berdahl is an Assistant Professor at Louisiana State University. He spends half of his time in the Experimental Music and Digital Media group (Music Department) and the other half of his time in the Cultural Computing group (Center for Computation and Technology). His interests include haptic musical instruments, embedded musical instruments, and physical modeling.

Paul Botelho

Paul J. Botelho is a composer, performer, developer, and artist whose work includes acoustic and electro-acoustic music, multimedia installation pieces, visual art works, vocal improvisation, and a series of one-act operas. He performs as a vocalist primarily with extended technique and incorporates the voice into much of his music. His work has been performed, presented, and exhibited in concerts, festivals, galleries, and museums across the Americas, Europe, and Asia. Botelho received a Ph.D. and M.F.A. in Music Composition from Princeton University, an M.A. in Electro-Acoustic Music from Dartmouth College, and a B.F.A. in Contemporary Music Performance and Composition from the College of Santa Fe. Currently he is Assistant Professor of Music at Bucknell University.

Thomas Rex Beverly

American composer Thomas Rex Beverly is a graduate of Trinity University in San Antonio, Texas where he received a bachelor's degree in music composition. At Trinity, he studied with Timothy Kramer, David Heuser, Jack W. Stamps, and Brian Nelson. Beverly studied abroad in fall 2008 in Prague, Czech Republic. There he studied composition with the Czech composer Michal Rataj and researched contemporary Czech music. He completed a Master of Arts in Teaching for Music Education at Trinity University and then taught as the Band and Choral Director at KIPP Aspire Academy in San Antonio. He has had pieces performed at the 2009 SCI Region VI Conference, the 2013 Electroacoustic Barn Dance Festival, the



2013 New Voices Festival at the Catholic University of America, the 2013 Christian Fellowship of Art Music Composers National Conference, the 2013 National Student Electronic Music Event at Temple University, the 2014 Biennial Symposium for Arts and Technology at Connecticut College, 2014 National Student Electronic Music Event at Georgia Southern University, the 2014 Bowling Green State University Graduate Student Conference, the 2014 SCI Iowa New Music Symposium, the 2014 TransX Transmissions Art Symposium in Toronto, Canada, the 2014 Sweet Thunder Electroacoustic Festival, the 2014 New York City Electroacoustic Festival, Circuit Bridges, IngenuityFest 2014, the Firenze Multimedia Festival, the 2014 International Computer Music Conference. His piece Ringing Rocks is a winner of the Cypress Symphonic Band Call for Score for new wind ensemble music and he was one of eight composers selected to attend the 2014 So Percussion Summer Institute. He is currently attending graduate school at Bowling Green State University in their Master of Music Composition degree program. He is studying with Elaine Lillios and Christopher Dietz and is a Music Technology Teaching Assistant.

Christopher Biggs

Christopher Biggs is a composer and multimedia artist residing in Kalamazoo, Mich., United States, where he is assistant professor of music composition at Western Michigan University. Biggs' recent projects focus on integrating live instrumental performance with interactive audiovisual media. In addition to collaborating with artists in other disciplines on projects, he treats all of his works as collaborations between himself and the initial performing artist by working with the performers during the creative process and considering their specific skills and preferences.

Per Bloland

Per Bloland is a composer of acoustic and electroacoustic music who has been praised by the New York Times for his "ear-opening electronic innovations." His compositions range from solo pieces to works for large orchestra, and incorporate video, dance, and custom built electronics. He has received awards and recognition from organizations including IRCAM, SEAMUS/ASCAP, Digital Art

Awards of Tokyo, the Martirano Competition, and ISCM. He is currently an Assistant Professor of Technology and Music Theory at Miami University, Ohio, and recently completed a Musical Research Residency at IRCAM in Paris. A portrait CD of his work is scheduled for release by Tzadik in spring 2015. For information see: perbloland.com, for scores: babelscores.com/perbloland

Jason Bolte

Jason Bolte is a composer of acoustic and electroacoustic music. He currently resides in Bozeman, Montana with his wonderful wife Barbara and their two daughters, Lila and Megan. Jason teaches music technology and composition at Montana State University where he directs the MONTana State Transmedia and Electroacoustic Realization (MONSTER) Studios. Jason earned a B.M. with an emphasis in Music Engineering Technology and a M.M. in Music Composition from Ball State University. He holds a D.M.A. in Music Composition from the University of Missouri - Kansas City Conservatory of Music and Dance, where he was a Chancellor's Doctoral Research Fellow, a School of Graduate Studies Dean's Doctoral Fellow, and an Ovation Scholar. Jason's music is available on the ABLAZE records, ELECTRO<>ACÚSTICO, SEAMUS, Irritable Hedgehog, Vox Novus, SoundWalk, and Miso Records labels.

Mary Boodell

Flutist Mary Boodell has won acclaim not only for her orchestral playing as Principal flutist of the Richmond Symphony but also for her numerous chamber music performances. Praised for her "lovely tone, excellent technique and seamless phrasing," she is equally at home in baroque and contemporary music. Ms. Boodell has performed at festivals across the US and Europe, including at Los Angeles' Hollywood Bowl, the Eastern Music Festival, Staunton Music Festival, the Chamber Music Society of Central Virginia and the Festival of Two Worlds in Spoleto, Italy. She has collaborated with esteemed artists such as the Shanghai Quartet, Jaime Laredo, and Yolanda Kondanassis. Born in Chicago, Ms. Boodell received her Bachelor of Music at the Oberlin Conservatory and her Master of Music at Northwestern University.



Chris Branton

Chris Branton serves as research scientist in the Cultural Computing group at LSU's Center for Computation & Technology (CCT) and is an adjunct faculty of computer science. He earned his Ph.D. in computer science at LSU, and worked for more than fifteen years as a professional software developer, project manager, and consultant before joining CCT. His research interests include distributed systems software architecture, collaborative human-computer interaction, and the use of computation in the arts and humanities.

Benjamin Broening

Composer Benjamin Broening is recipient of a numerous awards including Guggenheim, Howard and Fulbright Fellowships. His music has been commissioned by ensembles such as the Charlotte Symphony, the Richmond Symphony and the Arctic Philharmonic (Norway), performed in more than twenty countries and has been widely recorded. In addition to solo discs on Bridge (with eighth blackbird) and Innova (with duo runedako) his music has also been released by Centaur, Everglade, Equilibrium, MIT Press, Oberlin Music, Open G and SEAMUS.

Trembling Air, a disc of his solo and chamber music recorded by eighth blackbird and released in 2012 by Bridge Records, has been praised as "haunting," "enchanted" and "terrific" (*Cleveland Plain Dealer*), "magical" (*Fanfare*), "other-worldly" (*Gramophone*), "coruscatingly gorgeous" (*CD Hotlist*), and "alluring" and "captivating" (*Audiophile Audition*).

Broening is founder and artistic director of Third Practice, an annual festival of electroacoustic music at the University of Richmond where he is Professor of Music. He holds degrees from the University of Michigan, Cambridge University, Yale University, and Wesleyan University.

Cody Brookshire

Cody Brookshire's music has been performed at events and venues such as the 2015 N_SEME at Bowling Green State University, the OME Marathon Concert in Phoenix, Arizona, the New York City Electroacoustic Music Festival at the Abrons

Art Center, the Ammerman Center for Arts and Technology Symposium in Connecticut, and the Guangzhou Grand Theater in China. He has written music for So Percussion, the Athens Guitar Duo, the University of Georgia Bands, and the University of North Georgia String Orchestra. Awards include 1st place in the 2014 SCL Competition with his guitar trio, *Shrapnel*, and he was a semi-finalist for the 2013 American Prize in Composition with *Slumbers Kiss Your Golden Eyes* for flute, viola, and harp. Two of his electronic compositions have been digitally released: *Harmonic Meditation, No. 1* appears on the 2014 SEAMUS Electroacoustic Miniatures album *Transients*, and *M3TA11UR6Y* appears on Sonic Flux released by the EMPiRES label.

Julius Bucsis

Julius Bucsis is an award winning composer, guitarist, and music technologist. His compositions have been included in many juried concerts, conferences and festivals worldwide. He also frequently performs a set of original compositions featuring electric guitar and computer generated sounds. His artistic interests include using computer technology in music composition, developing musical forms that incorporate improvisation, and composing music for traditional orchestral instruments.

Ico Ivica Bukvic

The art of multisensory researcher and artist Ivica Ico Bukvic (b. 1976) is driven by ubiquitous interactivity. Bukvic's output encompasses aural, visual, acoustic, electronic, performances, installations, technologies, research publications, presentations, grants, patent disclosures, and awards. His most recent work focuses on communal interaction, immersive data sonification and spatialization, exploring connections among the arts and human health, and and recontextualizing STEM K-12 education through innovative approaches to creativity and technology.

Dr. Bukvic is currently an associate professor of music technology in Virginia Tech's School of Performing Arts (SOPA) where he serves as the founder and director of the Digital Interactive Sound and Intermedia Studio (DISIS) and the Linux Laptop Orchestra (L2Ork), Institute for Creativity, Arts, and Technology's (ICAT) Senior Fellow, and a member



of the Center for Human-Computer Interaction with a courtesy appointment in Computer Science. ico.bukvic.net

Carol Burch-Brown

Carol Burch-Brown is a visual artist and director of installation, imaging design, fieldwork and multi-channel video programming for Salt Marsh Suite. Her work has been exhibited widely in the US, including the DrawijAMES ng Center, Dorsky, and Urdang galleries in NYC and the Art Institute in Chicago. Projects include *Singing Darwin*, on Darwin and *Origin of Species; Trailers*, published by University of Virginia Press; *The Shamrock Bar Documentary Project*, Smithsonian Museum of American History Archive Center. She received an NEA Artist's Grant and an MFA from University of Chicago. She is a Professor in the School of Visual Arts and a Senior Fellow in the Institute for Creativity, Arts, and Technology at Virginia Tech. Salt Marsh Suite will be exhibited Oct. 2014–Jan. 2015 at Taubman Museum, Roanoke, Virginia.

Matthew Burtner

Matthew Burtner (<http://www.matthewburtner.com>) is a composer and sound artist specializing in concert music, ecoacoustics and interactive media. Born and raised in Alaska, he is First Prize Winner of the Musica Nova International Electroacoustic Music Competition, a 2011 IDEA Award Winner and a 2013 NEA Art Works Grant winner. His recently published telematic chamber opera "*Auksalaq*" received a 2014 Special Judges' Citation from The American Prize for "Extraordinary Use of Technology to Expand the Boundaries of Performance". He has been Invited Researcher at IRCAM, Provost Fellow at UWM's Center for 21st Century Studies, and a Howard Brown Foundation Fellow of Brown University. As Professor of Composition and Computer Technologies (CCT) in the University of Virginia's McIntire Department of Music he works closely with PhD students, and teaches courses in composition, computer music, interactive media, ecoacoustics and MICE (Mobile Interactive Computer Ensemble). In 2009 he founded the environmental arts non-profit organization, EcoSono (<http://www.ecosono.org>).

James Caldwell

James Caldwell is Professor of Music Composition and Theory at Western Illinois University. A native of Michigan, he earned a BM from Michigan State University, and a MM and DMus from Northwestern University. In 2005 he was named Outstanding Teacher in the College of Fine Arts and Communication and received the first Provost's Award for Excellence in Teaching. He was named the 2009 Distinguished Faculty Lecturer. For twenty-nine years he has been co-director of the Western Illinois University New Music Festival, which has hosted more than 200 composers for performances of their music. For fourteen years he has been curator of an annual concert of electroacoustic music, ElectroAcoustic Music Macomb. In 2004 he began studying studio art as a way to stretch creatively and to reacquaint himself with the experience of being a student, and earned a BA in Art from WIU in 2014.

Ryan Carter

Ryan Carter's music has been commissioned by Carnegie Hall, the National Flute Association, the MATA Festival, the Metropolis Ensemble, Present Music, The Milwaukee Children's Choir, and the Calder Quartet, with support from the National Endowment for the Arts, the Jerome Foundation, the American Composers Forum, and Meet the Composer. Ryan has collaborated with the Cleveland Chamber Symphony, the International Contemporary Ensemble, the Nieuw Ensemble, the JACK Quartet, the Mivos Quartet, the Princeton Laptop Orchestra, Transit, and many others. Awards include the Lee Ettelson Award, the Aaron Copland Award, the Left Coast Composition Contest, the National Association of Composers/USA Composer's Competition, and the Publikumspreis at the Heidelberg Spring Festival. Ryan was also a finalist for the 2005 Gaudeamus Prize and was chosen as one of NPR and Q2's favorite "100 Composers Under 40." Ryan holds degrees from Oberlin Conservatory (BMus), Stony Brook University (MA), and New York University (PhD).

Ramon Castillo

Ramon Castillo created the Bleep Blop Electroacoustic Ensemble, which serves to



encourage young composers to become familiar with new musical media and experimental performance techniques. Bleep Blop has worked regularly with several domestic and international artists including Sandeep Das & NonDuo (Improvisation/Video Group). Ramon has personally developed much of the technology (hardware and software) in use by the ensemble. Please visit bleepblop.com

Ramon has composed music for Gamelan Galak Tika, Alea III, Ensemble Robot, The Loud Objects, and various other ensembles and festivals. He has performed with artists such as the Kronos Quartet, Signal Ensemble, Wu Man, Terry Riley and Gamelan Galak Tika.

As full time faculty at the University of Massachusetts, Lowell, he teaches musicianship, music business and directs several ensembles. There, he works with a small team of faculty to overhaul the core musicianship curriculum. He also teaches composition part time at the Berklee College of Music.

Christopher Chandler

Christopher Chandler is a composer of acoustic and electroacoustic music currently serving as a visiting instructor at the University of Richmond where he teaches courses in composition and music technology. His music has been performed across the United States and Canada by ensembles including eighth blackbird, the Argento Chamber Ensemble, Ensemble Interface, the Cleveland Chamber Symphony, and Le Nouvel Ensemble Moderne. Recent performances include June in Buffalo, Domaine Forget, the Florida State University New Music Festival, the New York City Electroacoustic Music Festival, and several SEAMUS Conferences.

Christopher has been honored with awards including a BMI Student Composer Award, an ASCAP/SEAMUS Student Commission, two first prizes from the Austin Peay State University Young Composer's Award, winner of the American Modern Ensemble's Annual Composition Competition, and the Nadia Boulanger Composition Prize from the American Conservatory in Fontainebleau. Christopher previously received his B.A. in composition and theory from the University of Richmond, his M.M. in

composition from Bowling Green State University, and he is currently completing his Ph.D. at the Eastman School of Music.

Jason Charney

Jason Charney is a composer and media artist. His work addresses the intersection of art, science, and experience as well as the connection between observable phenomena, performative gesture, and sound. An active electroacoustic performer, Jason has a particular interest algorithmic composition and nonlinear sound experiences.

Jason is currently pursuing a Master's degree in composition at Bowling Green State University, where he serves as the Music Technology Graduate Assistant and studies with Elaine Lillios and Christopher Dietz. He holds a Bachelor of Music degree in composition and theory from the University of Kansas, where he studied with Forrest Pierce and Kip Haaheim.

He is a regular contributor to *I Care If You Listen*, a blog and magazine about new music and technology and plays in electroacoustic improvisation trio Netmoiré.

Kyong Mee Choi

Kyong Mee Choi, composer, organist, painter, and visual artist, received several prestigious awards and grants including John Simon Guggenheim Memorial Foundation Fellowship, Robert Helps Prize, Aaron Copland Award, Illinois Arts Council Fellowship, First prize of ASCAP/SEAMUS Award, Second prize at VI Concurso Internacional de Música Eletroacústica de São Paulo, Honorary Mentions from Musique et d'Art Sonore Electroacoustiques de Bourges, Musica Nova, Society of Electroacoustic Music of Czech Republic, Luigi Russolo International Competition, and Destellos Competition. She was a Finalist of the Contest for the International Contemporary Music Contest "Citta' di Udine and Concurso Internacional de Composicaí eletroacoustica in Brazil among others. Her music was published at CIMESP (São Paulo, Brazil), SCI, EMS, ERM media, SEAMUS, and Détonants Voyages (Studio Forum, France). Ravello records published her multimedia opera, *THE ETERNAL TAO*, which was supported by the John Simon



Guggenheim Memorial Foundation Fellowship and Roosevelt University. Aucourant Records published her CD, SORI, featuring her eight compositions for solo instrument and electronics. The project was supported by the IAS Artist Project Grant from the Illinois Arts Council. She is an Associate Professor of Music Composition at Roosevelt University in Chicago where she teaches composition and electro-acoustic music. Samples of her works are available at <http://www.kyongmeechoi.com>.

Thomas Ciufu

Thomas Ciufu is a sound artist, composer, improviser, and researcher working at the intersections of electroacoustic performance, interactive instrument design, sonic art and emerging digital technologies. He holds a Ph.D. in Computer Music and New Media from Brown University. International festival presentations or performances include Visiones Sonoras in Mexico City, the Enaction in Arts Conference in France, the New Interfaces for Musical Expression conference (Vancouver, Genoa, Montreal and Ann Arbor) as well as numerous conference presentations for the International Computer Music Society and International Society for Improvised Music. He has taught courses at Brown University, Smith College, Goddard College, and College of the Holy Cross. Currently at Towson University, Ciufu specializes in the areas of music technology and recording arts, with classes in sound recording and production, acoustic ecology and sound art, as well as electronic and computer music performance, interactive instrument design and sound programming.

Ian Michael Clarke

Ian Michael Clarke is a senior studying music composition at Indiana University's Jacobs School of Music. Currently a student of Aaron Travers, he has studied traditional composition with Don Freund, Sven-David Sandström, and Claude Baker, as well as electroacoustic composition with John Gibson and Jeffrey Hass.

Ian has been recognized for his compositional efforts as a 2010 California Arts Scholar in Music Composition and in conjunction with his academic achievements as a 2011 recipient of the prestigious Wells Scholarship. Through his affiliation with the

Wells Scholars program, he secured a grant in the summer of 2012 which he used to travel to Australia and conduct research on the 20th century composer John Antill, uncovering and retrieving several rare and otherwise undiscovered scores.

As a composer, Ian loves the idea of creating "synesthetic music." He approaches this idea both externally by working on multimedia projects, including video pieces, multi-channel electronic sound art, ballet, and performance art; and internally by synthesizing other art forms into abstract and/or algorithmic ideas to be realized musically. Separate of his more avant-garde pursuits, Ian also has an intense interest in creating an aesthetic that is both intriguing to those who involve themselves in the new music world and accessible for those who are unfamiliar with it.

Nicholas Cline

Nicholas Cline writes acoustic and electroacoustic music. His compositions have been performed in the US and in Europe and he was featured on the 2012 SEAMUS electroacoustic miniatures recording series: Re-Caged. He holds degrees from Columbia College Chicago and Indiana University. He is currently studying and teaching aural skills at Northwestern University. He has studied electronic music with Chris Mercer, John Gibson, and Jeff Hass.

Ted Coffey

Ted Coffey makes acoustic and electronic chamber music, sound art, and songs. His work has been presented in concerts and festivals across North America, Europe and Asia. Recently he has focused on collaborations with dance, developing large-scale works with Paul Matteson, Jennifer Nugent, and Bill T. Jones. In Open Space, Newton Armstrong described Coffey's music as "subtle, weird and devoid of heroics. It's the kind of music that resonates for days after you've heard it, and its spaces and gestures continue to form into new and extraordinary geometries." Coffey studied composition with Jon Appleton, Christian Wolff, Pauline Oliveros, Paul Lansky, and others, earning degrees at Dartmouth (AB), Mills College (MFA) and Princeton (MFA, PhD). He is Associate Director of the Virginia Center for Computer Music and



Kevin Davis

Kevin Davis is a composer, improviser, and cellist. Originally from Appalachian Tennessee, he has at various times been based out of Memphis, Chicago, New York, and Istanbul, where he has played in and composed for a large variety of musical situations across a wide spectrum of contemporary musics. He has degrees in music composition from the University of Memphis (B. Music) and the Centre for Advanced Musical Studies (MIAM) in Istanbul, Turkey (MA). He is currently a PhD candidate in Composition and Computer Technologies at the University of Virginia.

After many years of focusing his artistic practice on improvisation, Kevin has recently become re-engaged with more traditional forms of composition. His recent creative work deals with mediating the sometimes problematic relationship between composition and improvisation by bringing differing types of structure into confrontation with the unstable properties present in motion, gesture, and sound.

Scott Deal

Performer, composer and media artist Scott Deal engages new works of computer interactivity, networked systems, electronics and percussion. His recordings have been described as "soaring, shimmering explorations of resplendent mood and incredible scale"...."sublimely performed", and his recent recording of Pulitzer prize-winning composer John Luther Adams' Four Thousand Holes, for piano, percussion, and electronics was listed in *New Yorker Magazine's* 2011 Top Ten Classical Picks. He has performed at venues worldwide, including Musicacoustica Beijing, Almeida Opera London, Arena Stage Washington, Supercomputing Global, Zerospace, SIGGRAPH, Chicago Calling, IEEE CloudCom, Ingenuity Festival, ICMC, NIME, PASIC and with groups that include ART GRID, Another Language, Digital Worlds Institute, Callithumpian Consort, Percussion Group Cincinnati, and the Helsinki Computer Orchestra. He resides in Indianapolis, Indiana where he is a Professor of Music and Director of the Donald Louis Tavel Arts and Technology Research Center at Indiana University Purdue University Indianapolis (IUPUI).

David Dow

David Dow is a graduate of Modesto Junior College and a former Instructional Aide in the MJC Music Department. He received a Bachelor of Arts degree in music composition from the University of California, Santa Barbara and a Master of Arts degree in music composition from San Jose State University. He has also studied computer music at Massachusetts Institute of Technology. Mr. Dow has been a composer, programmer and consultant for Activision Software, Inc. in Mountain View, CA and Audiolight Music Software, Inc. in Los Gatos, CA. He was the composer for the Atari 520-1040ST computer demo and was the sound-synthesizer consultant for the Apple IIGS National Sales Training Convention in Cupertino, CA. Mr. Dow has been a music instructor at DeAnza College, Cupertino, CA, Chabot College, Hayward, CA and at California State University Stanislaus. He is currently teaching piano, recording and electronic music at MJC and teaching music privately. Through his company, Aurora Music Productions, he produces music for theater, dance and video soundtracks as well as radio and television commercials. Mr. Dow has played music professionally for more than thirty-seven years and is a prolific composer with over one hundred compositions in many different styles.

Trey Duplantis

Trey Duplantis is a Louisiana composer and creator of electronic playthings, currently exploring the San Francisco Bay Area. He is interested in creating new musical interactive experiences defined by systems of play; he also creates works of electronic music that draw inspiration from Louisiana folk traditions.

Daniel Eichenbaum

Composer Daniel Eichenbaum's music has been performed and published throughout the United States, Europe, and Asia. His works frequently combine his love for outer space with live performance and computer-music technology. Besides composing, he is a devoted teacher, working with students of all ages from the United States and abroad. He currently serves as Assistant Professor of Music at Fairmont State University in Fairmont, WV, where he hosts the West Fork New Music Festival. From 2005–2007, he was Instructor of Music at Mahidol University in Thailand and also



taught master classes in Myanmar. Daniel earned his DMA in Music Composition from the University of Missouri-Kansas City in 2011, studying with James Mobberley, Paul Rudy, Chen Yi, and Zhou Long. For more information and work samples, please visit danieleichenbaum.com.

Nicholas Elert

Nicholas Elert has been composing and performing in rock and metal bands since 2002. This work has been released on the Gilead Media, Halo of Flies, Fin, Oxide Tones, Alerta Antifascista, and Zankyo recording labels. Other works include scores for the Head Trauma Production films *Dead Weight* and *Pity*. Nicholas is studying composition at the University of Wisconsin-Milwaukee.

Laurent Estoppey

After studying saxophone at the Conservatory of Lausanne, where he received in 1994, a concert license, the Swiss saxophonist established in Greensboro, NC, Laurent Estoppey, devoted himself mostly to contemporary music. Numerous collaborations with composers have led him to create at least one hundred works. Now his musical activity is divided between written music and improvisation, and it occurs throughout Switzerland, many European countries, but also in Canada, USA, Argentina, Guatemala and South Africa. As a composer, Estoppey works mainly with interactive electronics, interested in the encounter of the written music, the improvisation and the electronics. His pieces are performed mainly in Switzerland and in the USA. As a saxophonist, Estoppey works with the following orchestras: Orchestre de la Suisse Romande Orchestra, Lausanne Chamber Orchestra, Basel Symphony, UBS Verbier Festival Orchestra, Timisoara, Orchestra of the State of Lithuania, Lausanne Sinfonietta, NEC - Chaux-de- Fonds-Contrechamps Geneva, Staatskapelle Weimar.

Estoppey has founded and developed several chamber music groups including: COLLAPSS (Collective for Happy Sounds, Greensboro) DILEMME (saxophone / piano with Myriam Migani), ST15 (saxophone / piano with Virginie Falquet) DEGRE21 (saxophone / guitar with Antonio Albanese), 1+1 (dual-concept Anne Gillot, recorders), compagnie CH.AU (set of nine musicians)

and the 4TENORS (saxophone quartet with Vincent Daoud, Rico Gubler and Lars Mlekusch). Estoppey recently started a saxophone duet with Steven Stusek, STACKS. Additionally he is regularly invited to play with the saxophone quartet Basel ARTE Quartet and is a member of Swiss baBel ensemble. His improvisational collaborations involve meetings and concerts with musicians from all backgrounds. Many groups he has worked with are still active today, including: Zkrabuj et chou et pâté (with drummer Luc Müller), GUEZ TRIO (Edmée Fleury, voice, François Rossi, drums), and 1+1 + Stephan Perrinjaquet. Estoppey has also worked alongside many independent musicians such as Jacques Demierre, Pierre Favre, Pierre Audétat, Malcolm Braff, Urs Leimgruber, Nick Didkovsky, Anthony Coleman and Ikue Mori.

www.laurentestoppey.com

Hunter Ewen

Hunter Ewen is a dramatic composer, educator, and multimedia designer. During the day, Dr. Ewen teaches students strategies for digital creativity. At night, he composes, solders, choreographs, and videographs solo and collaborative projects around the world. His works rail against the faded, gratuitous borders that separate art from science, music from sound, and meaning from meaninglessness. Ewen values frenzy. He buzzes and sneaks and desperately loves. His work is soothing, startling, virtuosic, and absurd. It grooves with dense, layered textures. It lusts for yowls and yips and wails and squeals. For screams that masquerade as art. For clamor and deviance. His compositions swing from chandeliers. At The University of Colorado, Boulder, Ewen teaches composition, music technology, and design aesthetics for the colleges of Music and Engineering as well as interdisciplinary courses through the Alliance for Technology, Learning, and Society (ATLAS). Ewen also directs the 64 Bit Composition Competition, serves on faculty of Reel Kids Theater Troupe, and works as the editorial assistant for Music Theory Online.

His acoustic compositions garner awards and performances from Punto y Raya, Ouroboros Review, The Playground Ensemble, the Colorado Constitution Day Competition, Gamma UT, Studio 300, and his graphic scores were featured



prominently in the Pulitzer Prize nominated book, *Armor, Amour*, by Amy Pence. Ewen work has been performed across North America, Europe, Australia, and Asia by groups like the Beethoven Academy Orchestra, Cairo Symphony, Silesian Philharmonic, Greater Cleveland Flute Society, Science on a Sphere, Frequent Flyers Aerial Dance, Third Coast Percussion, Alarm Will Sound, and by distinguished performers like Greg Banaszak, Lina Bahn, and Bill Mooney. His installations have been seen in the Denver Museum of Art and the Roser Atlas Atrium at CU-Boulder. Ewen's compositions and orchestrations are published by Ken Dorn, Alphonse LeDuc, Music Minus One, and Theodore Presser, and Skinny Dip Publications. Read more at www.HunterEwen.com.

Neal Farwell

Neal Farwell composes music for instruments and voices and for the acousmatic medium, and he is particularly interested in exploring the meeting points of electro- and acoustic. Neal gained his MMus and PhD in composition from the University of East Anglia, UK, studying with Simon Waters. In 1998 he moved to the USA as a Knox Fellow at Harvard University. He studied with Bernard Rands and Mario Davidovsky at Harvard, with David Rakowski at Brandeis University, and was a member of faculty at Longy School of Music. Since January 2002, Neal has taught at the University of Bristol, UK, where he is Senior Lecturer in Music and Director of the Composition and Recording Studios, and is currently Deputy Head of the School of Arts. Neal is active also as a performer, regularly conducting the University Symphony Orchestra and New Music Ensemble, working with outside ensembles, and presenting the electroacoustic concert series *Sonic Voyages*.

Jon Fielder

Jon Fielder is a composer of electroacoustic and acoustic music, all of which shows a strong interest in timbre, texture, spatialization and narrative. His music is often inspired by natural landscapes, various topics of science and mathematics, manipulations of the human voice - both spoken and sung - and from literature.

Jon's music has been presented and performed

at the SEAMUS conference (2013), Toronto Electroacoustic Symposium, Electronic Music Midwest, the Electroacoustic Barn Dance, CEMCircles Festival, N-SEME, NASA conference, the International Double Reed Society Conference (2012), Omaha Under the Radar, the Northern Ohio Music Exchange (NOMA) concert at the Oberlin Conservatory, the Olmsted Festival of the Arts, and included in the Alex Sramek call for scores for the Voxnovus 15-Minutes of Fame series. Jon was also the first recipient of the Mark Phillips Distinguished Professor award for composition in 2009 (Ohio University). He received a M.M. degree in composition from Bowling Green State University, and B.M. degrees in both composition and theory from Ohio University. He is currently pursuing a D.M.A. in composition at the University of Texas-Austin under the study of Russell Pinkston and Bruce Pennycook. Previous composition instructors include Elaine Lillios, Mikel Kuehn, Franklin Cox, Mark Phillips and Christopher Dietz.

Eli Fieldsteel

Eli Fieldsteel is a composer of electroacoustic and acoustic music currently working and teaching in the Electronic Music Studios at The University of Texas at Austin. Fieldsteel is the recipient of the 2014 James E. Croft Grant for Young and Emerging Wind Band Composers, first prize in the 2012 ASCAP/SEAMUS Student Commission Competition, as well as awards and recognition from other organizations, including the Bandmasters' Academic Society of Japan and the Frank Ticheli Competition. His works have been performed by the Dallas Wind Symphony, the UNT Symphony Orchestra, the Kawagoe Sohwa Wind Ensemble, and the principle flautist of the Aarhus Symphony Orchestra, Lena Kildahl.

Fieldsteel's music and research reflects an ongoing interest in the intersection between music technology and contemporary instrumental practice, covering topics such as human-computer improvisation, interactivity, and generative music. An active collaborator, he has worked with dancers, choreographers, lighting designers, architects, and video artists, among others.



Orlando Jacinto Garcia

Through more than one hundred and fifty works composed for a wide range of performance genres, Orlando Jacinto Garcia has established himself as an important figure in the new music world. The distinctive character of his music has been described as “time suspended- haunting sonic explorations” qualities he developed from his studies with Morton Feldman among others.

Born in Havana, Cuba in 1954, Garcia migrated to the United States in 1961. In demand as a guest composer, he is the recipient of numerous honors and awards from a variety of organizations and cultural institutions including the Rockefeller, Fulbright, Dutka, Civitella Ranieri, Bogliasco, and Cintas Foundations, the State of Florida, the MacDowell and Millay Colony, and the Ariel, Noise International, Matiz Rangel, Nuevas Resonancias, Salvatore Martirano, and Bloch International Competitions. Most recently he has been the recipient of 3 Latin Grammy nominations in the best Contemporary Classical Composition Category (2009-11). With performances around the world, his works are recorded on New Albion, O.O. Discs, CRI /New World, Albany, North/South, CRS, Rugginenti, VDM, Capstone, Innova, CNMAS, Opus One and Toccata Classics, and available from Kallisti Music Press.

Garcia is the founder and director of the NODUS Ensemble and the Miami Chapter of the International Society for Contemporary Music as well as several international festivals including the New Music Miami ISCM Festival. A dedicated educator, he is Professor of Composition for the School of Music and Composer in Residence for the CARTA Miami Beach Urban Studios at Florida International University in Miami.

For more information visit <http://www.orlandojacintogarcia.com>

Douglas Geers

Doug Geers began composing music with computers shortly after his Dad brought home an Atari 800 in 1983. Since then, he has used technology in nearly all of his works, whether in the compositional process, as part of their sonic

realization, or both. He has created concert music, installations, and several large multimedia theater works.

Reviewers have described Geers’ music as “glitchy... keening... scrabbling... contemplative” (New York Times), “kaleidoscopic” (Washington Post), “fascinating...virtuosic...beautifully eerie” (Montpelier Times-Argus), “Powerful” (Neue Zuercher Zietung), “arresting...extraordinarily gratifying” (TheaterScene.net), “rhythmically complex, ominous” (CVNC), and have praised its “virtuosic exuberance” (Computer Music Journal) and “shimmering electronic textures” (Village Voice.)

Geers’ works include *Inanna*, a 90-minute multimedia theater piece (2009, Zürich); an opera, *Calling* (2008, New York); *Sweep*, written for the Princeton University Laptop Orchestra (2008, Chicago); a violin concerto, *Laugh Perfumes*, commissioned by Festival Unicum for the RTV Orchestra of Slovenia (2006, Ljubljana); *Gilgamesh*, a 70-minute multimedia theatrical concerto; and numerous works of acoustic and electroacoustic concert music.

Geers completed his doctorate at Columbia University, where he studied with Tristan Murail, Fred Lerdahl, Brad Garton, and Jonathan D. Kramer. He is an Associate Professor of Music Composition at Brooklyn College, a campus of the City University of New York (CUNY). He is Director of the Center for Computer Music at Brooklyn College, and serves on the Ph.D. composition faculty of the CUNY Graduate Center. For more information, please see www.dgeers.com.

Ricky Graham

Richard Graham is a guitarist, programmer, researcher, and music producer from Northern Ireland. Graham has performed in the US, Asia, U.K., and continental Europe, produced multiple sessions for BBC radio, and released multiple records spanning many styles of guitar music. His compositions have featured on British and US television, as well as the popular video game, Rock Band. Ricky has been an artist-in-residence at STEIM (Studio for Electro-Instrumental Music; 2010) where he developed the first iteration of his



live performance system for multichannel guitar performance. He completed his Ph.D. in Music Technology at the University of Ulster in 2012 and he now serves as an Assistant Professor of Music and Technology at Stevens Institute of Technology in Hoboken, New Jersey. His most recent paper on live performance systems was presented at NIME 2014 (Goldsmiths, University of London) and his most recent journal article on performance strategies for spatial music is forthcoming in the Divergence Press research journal (University of Huddersfield). Graham’s most recent musical work, “*Nascent*,” was released on Fluttery Records in 2012 and a new series of releases are due in late 2014 and early 2015.

Ethan Greene

Ethan Frederick Greene creates music and sound art for concert hall, gallery, stage and screen. His work spans a wide range of styles and genres, including instrumental, vocal and electroacoustic chamber music; opera and orchestral works; sound design and audio installations; and pop and electronica. His music has been featured on Showtime and National Geographic networks, and in video games “*Waking Mars*” and “*Spider: The Secret of Bryce Manor*.” He has received commissions from ensembles and performers around the world, including the Houston Grand Opera, the East Coast Contemporary Ensemble, Opera Southwest, the Fountain City Ensemble and line upon line percussion, and awards and selections from ASCAP, SEAMUS, ICMC and SCI. He currently serves as Assistant Professor of Digital Arts at Stetson University. For more, please visit ethangreene.org.

Kerry Hagan

Kerry is an American-born composer currently living in Ireland. She works in both acoustic and computer media. She develops real-time methods for spatialization and stochastic algorithms for musical practice. Her work endeavours to achieve aesthetic and philosophical aims while taking inspiration from mathematical and natural processes. In this way, each work combines art with science and technology from various domains.

As a researcher, Kerry’s interests include real-time algorithmic methods for music composition and

sound synthesis, spatialization techniques for 3D sounds and electronic/electroacoustic musicology.

In 2010, Kerry led a group of practitioners to form the Irish Sound, Science and Technology Association, where she is currently President. Kerry is a Lecturer at the University of Limerick in the Digital Media and Arts Research Centre. She is the Principal Investigator for the Spatialization and Auditory Display Environment (SpADE).

Bruce Hamilton

Eclectic composer and improviser Bruce Hamilton (b. 1966) grew up in New Jersey and lives in Bellingham, Washington. His music is published by Non Sequitur Music and his recordings have been released on the Albany, Amaranth, and/OAR, black circle, blank space, Capstone, Ilse, Inner Cinema, Linear Obsessional, Memex, Phill, SEAMUS, Spectropol, split-notes, Three Legs Duck and Mark labels. He has received honors, awards and commissions from ALEA III, AMC, ASCAP, PAS, Barlow, Carbondale Community Arts, Indiana University, Jerome Foundation, National Society of Arts and Letters, Pittsburgh NME, Whatcom Symphony, Russolo-Pratella Foundation, and SEAMUS. A graduate of Indiana University (degrees in percussion performance and composition), Hamilton teaches at Western Washington University, co-organizes the Bellingham Electronic Arts Festival & Sound Culture Adventures Fest, and runs the Spectropol label. web: brucehamilton.info

Joshua Harris

Joshua Harris (b. 1977) is a composer from Pilot Mountain, North Carolina. He holds degrees from Appalachian State University, Brigham Young University, and the University of North Texas. Joshua is currently an assistant professor of music at Sweet Briar College in central Virginia. Previously he taught at Southeastern Oklahoma State University, the University of North Texas, and Brigham Young University. His music is grounded in a fascination with visual art, textures, sound spectra, and extreme temporal manipulations and has been heavily influenced by studio techniques of electroacoustic composers. He has been commissioned by the Barlow Endowment for Music Composition, the Nova Ensemble at UNT, among others. His work



has been performed throughout the United States as well as South Korea. When he is not composing he enjoys writing about art and music, traveling with his wife and two daughters, and thinking about the formal structure of sitcoms

Akiko Hatakeyama

Akiko is a composer, singer, and audio-visual artist who is a native of Yokohama, Japan. She is interested in crossing boundaries between traditionally written music, improvisation, electronics, computer based live interactivity, and visual components. Storytelling, memories, and nature often play an important role in Akiko's work, and she most often finds beauty in simplicity. Designing and building instruments/controllers is a part of her current study as well. Akiko obtained her B.A. in music from Mills College, and received her M.A. in Experimental Music/Composition at Wesleyan University. Since September 2011, Akiko has been engaged in PhD study in the MEME program at Brown University. Her instructors include Alvin Lucier, Anthony Braxton, Ronald Kuivila, Maggi Payne, Chris Brown, Jim Moses, Todd Winkler and Butch Rovin.

Paul Hembree

Paul Hembree's work as composer and computer musician explores the boundaries between the perceptual categories of sonic materials and the processes that guide them: specifically navigating the space between organic and synthetic sounds in a search for uncanny or sublime hybrids.

His recent projects include a *La Jolla Symphony* and *Chorus commission, Ikarus-Azur* (2013), *Light: Frozen and Refracted* (2012), premiered by Ensemble Intercontemporain, and a series of digital audio-visual works based on synthetic biology, known as the *Cellular Automata Studies* (2009-2014). His works – described as having “impressive depths” (San Diego Theatre Review) and using “ingenious text combinations” (San Diego Union-Tribune) – have been performed around the United States and Europe, at events including IRCAM's ManiFeste 2012, MusicX, the New West Electronic Arts and Music Organization, the California Electronic Music Exchange, and the Electroacoustic Juke Joint.

Aaron Henderson

Aaron Henderson's videos and installations examine the ways that humans move. Recent projects look at the personal, cultural and political ramifications of all action, from intimate gestures to displays of super-human acrobatics. Well acquainted with movement, he threw himself into walls and off of platforms for STREB Extreme Action, an acrobatic performance company from 2002-6. His videos, installations and projection designs have been presented at Lincoln Center, the Wexner Center and many other theaters, colleges and festivals across the country. Aaron co-founded LOSTWAX, an East Coast company creating fusions of performance and video, and edited and founded the International Thought Exchange, a now defunct mail art organization. Currently, Aaron is an Assistant Professor in the Studio Arts Department at the University of Pittsburgh.

Stephen Hennessey

Stephen Hennessey earned his B.A. in Music from The University of Mary Washington in 2014. There, he established and led the UMW Composers' Ensemble during its inaugural year, studied classical guitar performance with Bruce Middle, earned the Patricia P. Norwood Scholarship for excellence in musicological research, and studied composition with Mark Snyder. He currently resides in Central Virginia, where he is working on a commission for the White Oak Ensemble, writes various other pieces of unusual instrumentation, and is doing preliminary songwriting for his post-black metal project.

Mitchell Herrmann

Mitchell Herrmann is a composer and video artist studying at Oberlin College and Conservatory. Although his primary focus is on acousmatic music, Herrmann's previous work has included experimental film and acoustic music. His compositions have been particularly influenced by his study of phenomenological approaches to musical perception. His work has been accepted into festivals around the world including the Seoul International Computer Music Festival and New York City Electroacoustic Music Festival. Recently, Herrmann was selected as a finalist for



the Allen Strange composition award, and his piece *Kettledrum Organ* was published on the 2014 SEAMUS Miniatures album. In October of 2014, he was the youngest composer accepted to study with Jonty Harrison in residence at the Atlantic Center for the Arts. Herrmann has studied composition under Peter Swendsen and Tom Lopez, and participated in master classes or lectures by George Lewis, Robert Normandeau, Pierre Jodlowski, and Bertrand Dubedout.

Jordan Hill

Dr. Jordan Hill studied broadly in mindfulness practices at Naropa University, is certified as a mindfulness instructor, and has completed a month-long Dathun meditation retreat in the practice lineage of Chogyam Trungpa. For the past six years, Dr. Hill has worked to help develop the contemplative community at Virginia Tech and across southwest Virginia. His style of mindfulness practice incorporates body work, sitting practice and a range of moving practices. His morning practices sessions will help participants center themselves both personally and collectively in the aspiration of fostering creativity and collaboration at the conference.

Elizabeth Hoffman

Elizabeth Hoffman composes in acoustic and computer-driven media. She also writes on facets of analysis and representation in electroacoustic and avant-garde musics with articles in *The Computer Music Journal*, *Organized Sound*, and *Perspectives of New Music*. Compositional interests include a focus on timbre, texture and spatialization as expressive signifiers. Her music appears on empreintes DIGITALes, NEUMA, Centaur, World-Edition, Capstone, Innova, and Everglade labels. Recent reviews cite her “visionary sound collages” (Chain DLK USA, Reviews). Prizes have come from the Bourges, Prix Ars, and Pierre Schaeffer competitions, the Seattle Arts Commission, ICMA, and the Jerome Foundation. She currently teaches in the Department of Music at NYU and has collaborated on computer music projects over the past few years with artists including flutist Margaret Lancaster, Jane Rigler, dancer Elena Demyanenko, Uilleann pipes player Ivan Goff, clarinetists Marianne Gythfeldt and Heather Roche, TimeTable

percussion, and the FLUX Quartet.

Danny Holmes

Danny Holmes is a composer, sound artist, researcher, software developer, and music educator. Danny is currently pursuing a PhD in Experimental Music and Digital Media at Louisiana State University, and he is an Adjunct faculty member in music technology at Southern University. His major research areas include mobile music, gesture and performance, and music technology in education.

Eric Honour

Devoted to exploring and furthering the intersections of music and technology, Eric Honour's work as a composer and saxophonist has been featured in numerous international conferences and festivals like ICMC, SEAMUS, Spark, FEMF, BEAF, EMM, and others. A member of the Athens Saxophone Quartet and noted soloist specializing in performing with electronics, he appears regularly in Europe and the United States. Honour's music has been performed around the world, recognized in many competitions, and recorded by various artists on the Capstone, Ravello, and Innova labels. Professor of music and director of the Center for Music Technology at the University of Central Missouri, his work as an audio engineer and producer appears on the Innova, Centaur, Ravello, Irritable Hedgehog, Orpheus Classical Music, Everview, North Star Appli, and E.M.E. Action labels, as well as on numerous independent releases.

Elizabeth Houston

Harpist Elizabeth Houston has dedicated much of her career to furthering audience appreciation of music by living composers through advocacy, education, and performances, and has been credited with helping to “bring the harp into the 21st century” by *Harp Column* editor Kimberly Rowe. Elizabeth received her master's degree in harp performance from Temple University. She maintains a rigorous performance schedule, including solo appearances in the Delaware Center for Contemporary Art, the Philadelphia Conference Center, Dalet Art Gallery, and the Maas Center for Performing arts. She has performed harp composition workshops at Temple University and Western Washington University, as



well as one-on-one work with composers across the US. She is also involved with the Lyra Society, which specializes in fundraising to commission works from young composers and provide harp education to underprivileged youth. Elizabeth is currently serving her first term as the president of the Philadelphia Chapter Harp Society.

Aurie Hsu

Aurie Hsu is a composer, pianist, dancer, and educator. She composes instrumental and electronic music and collaborates with choreographers and designers of musical robots. Aurie received a Ph.D. in Composition and Computer Technologies from the University of Virginia and holds degrees in piano performance (BM, Oberlin Conservatory; MFA, Mills College) and Electronic Music and Recording Media (MFA, Mills College). Aurie's works have been performed by the Da Capo Chamber Players, Relâche, and the Talujon Percussion Quartet among others and presented at ICMC, SEAMUS, SIGCHI, Pixelerations, Third Practice Festival, and the Logos Tetrahedron Concert Hall. Her ongoing projects include the RAKS system, a wireless sensor interface designed for belly dance in collaboration with composer Steven Kemper, as well as electroacoustic music for the de novo dance company based in New York City. Aurie is a Lecturer in the Mason Gross School of the Arts Music Department at Rutgers University.

Edwin Kenzo Huet

Edwin Kenzo Huet is a composer and sound artist from San Jose, California studying computer music composition under Dr. McGregor Boyle and Dr. Geoffrey Wright at the Peabody Institute of Johns Hopkins. His works have been featured at SEAMUS 2014 at Wesleyan University, ICMC/SMC 2014 in Athens, Greece, and across the U.S. and Asia through various mediums and art forms. His 2013 piece "*Prism*" for Yamaha Disklavier and custom reactive software received 2nd place in the 2014 Peabody Prix D'Été competition. His music was recently featured on contemporary dancer Shou-Yuo Liu's SHAPDE 5.5 project in Taipei. Edwin is also an active performer and improviser of electro-acoustic music, having performed and collaborated with the likes of pianist Craig Taborn, bassist Michael Formanek, Divisio, the Centre Street Quartet, The

Peabody Wind Ensemble, The Out Of Your Head Collective, and various others.

Peter Hulen

Peter Hulen is Associate Professor of Music and Chair of the Music Department at Wabash College in Crawfordsville, Indiana where he teaches music theory, composition, electronic music, and humanities courses. He received a Bachelor of Music in Composition from the University of Tulsa, a Master of Music in Composition from Southwestern Theological Seminary in Fort Worth, Texas, a 中级班结业证书 from 北京第二外国语学院, and a Doctor of Philosophy in Music from Michigan State University. For fun, he plays in a pretty good Renaissance recorder consort, sings in a very good choir, landscape gardens, cooks unhealthy food, and tries to maintain some kind of contemplative practice.

Derek Hurst

The recent music of composer Derek Hurst is nearly equally split between electroacoustic and acoustic concert music. He has received several awards and honors including Fromm Foundation Commission, Artist's Fellowships from the Massachusetts Cultural Council and The Copland House Residency. "*Interloper*", for piano trio, was the winning composition of the Wayne Peterson Prize. He has worked with prominent performers and new music groups, often in close collaboration. "*Bacchanalia Skiapodorum, for alto saxophone and electronics*", was released on Brian Sacawa's critically acclaimed CD "*American Voices*" and more recently "*An Wem for toy piano and electronics*" was released on pianist Xenia Pestova's solo release, "*Shadow Piano*" (Innova).

Derek earned the Ph.D. in composition/theory from Brandeis University with additional studies at University of Illinois. Currently he teaches courses in music theory, composition and electronic music as at Berklee College of Music.

Simon Hutchinson

Simon Hutchinson's work incorporates his experience in diverse musical styles from across the world. Drawing especially from jazz, the avant-



garde, the Baroque, and the traditions of Japan, Korea, and Indonesia, Hutchinson creates unique music and intermedia works that explore themes of modernity, technology, and global community.

Hutchinson holds a PhD in Composition with supporting coursework in Intermedia Music Technology from the University of Oregon, where he was named the Outstanding Graduate Scholar in Music. Notable composition teachers include Jeffrey Stolet, Robert Kyr, David Crumb, Hi Kyung Kim, David Cope, and Peter Elsea. Additionally, Hutchinson spent several years in Japan studying shamisen (three-stringed lute) and Japanese Folk Music with virtuoso Sato Chouei and shakuhachi (vertical bamboo flute) with Master Sato Chikuen. Currently, Hutchinson is Visiting Assistant Professor of Composition at the University of Montana.

Daehoon Jang

Daehoon Jang is currently a doctoral student at the UIUC in music composition. He got his bachelor's degree in composition from Kookmin University in Korea in 2005 and lived in France for a few years while studied with Michel Merlet and Allan Gaussin in Paris. He obtained the superior diplom from Ecole Normale de Musique de Paris in 2008 and is now a student of Reynold Tharp, Sever Tipei, and Scott Waytt. He has won a Prize, '37th Seoul Music Competition (Chamber Division), and got Grand Prize, 'The 37th Nanpa Nationwide Music Competition (Composition Division) in Korea. He was selected as a Young Talented Composer, 'The 37th Pan Music Festival in Korea, and 'Korean music expo 2010'. He advanced to Final Round, 'The 2nd Boulogne International Competition,' France.

Chen-Hui Jen

Chen-Hui Jen's works have been performed at multiple new music festivals and concerts, including the ISCM World New Music Days, Acanthes Music Festival, ACL Music Festival, EarShot San Diego Workshop, New Music Miami Season, and Taipei International New Music Festival. Her works have won prizes in the National Taiwan Symphony Orchestra Composition Competition, the International Tsang-Houei Hsu Music Composition Competition, the Formosa Composition, the Chai Found Sizhu Music Composition Competition, and

the Taiwan Literature and Fine Arts Composition Competition. She has also received commissions from the Palimpsest Ensemble, Ensemble ISCM-Taiwan, Taipei Chamber Singers, Little Giant Chinese Chamber Orchestra, and Ching-Yun Chorus, as well as multiple grants from the Taipei Department of Cultural Affairs, and the Taiwan National and Arts Foundation.

Christopher Jette

Christopher Jette is a curator of lovely sounds; a composer, performer, educator and concert organizer based in Alaska. His compositions, both electronic and acoustic investigate the intersection of humanity and modern technology through an exploration of techniques and tools that emphasize facets of this paradigmatic space. Christopher has created a large range of acoustic and electronic compositions and frequently collaborates with artists of various disciplines. He has created works that involve dance, theater, websites, electronics, food, toys, instrument design and good ol' fashioned wooden instruments. Having trained as a violinist, the compositions are strongly coupled to the performer that they are written for, highlighting their unique musical perspective. His works for instrumentalist(s) and electronics exploit the unique abilities of the technology and the human(s) involved.

Timothy Johnson

Finding inspiration in everything from chess games to Korean traditional music, composer Tim Johnson creates engaging, multi-dimensional musical experiences. Dr. Johnson is also a classical guitarist, most recently premiering his work for guitar and Korean janguu entitled: Guitar Sanjo: Open Wide. Other recent performances of Dr. Johnson's music include *Bogie vs. Bacall for Pierrot ensemble* (2012), performed by Ensemble Paramirabo in New York at the 2014 mise-en festival; *Fortune Smiles* for flute, percussion and electronics performed by Due East in 2013; *Prelude, Turnaround and Happy Ending for oboe, string trio and percussion* (2010), premiered by Ensemble Dal Niente; and *Antyphony: Kasparov vs. Deep Blue* for large ensemble, a finalist in the 2008 Alea III Competition. His co-commissioned electronic work *Tensile Strength* received "Honorary



Prize" in the 2008 "Musica Nova" competition. Dr. Johnson is also a noted researcher in microtonality, and is currently helping the Kepler Quartet record Ben Johnston's music.

Richard Johnson

Richard Johnson is a multimedia artist and composer whose interest in music was piqued during a childhood heavily impacted by film. Equal parts Kurosawa and Spielberg combined to create his ongoing interest in culture and history, the music of Takemitsu and Williams, and an obsession with mystery, adventure, and storytelling. Richard received his DMA from the University of Missouri-Kansas City where he studied with Chen Yi, James Mobberley, Paul Rudy, and Zhou Long. He also holds degrees from the Hartt School at University of Hartford (MM) and West Chester University of Pennsylvania (BM). Richard currently is Assistant Professor of Multimedia Arts Technology at Western Michigan University.

Tohm Judson

Tohm Judson is a composer and multimedia artist currently teaching at Winston Salem State University, North Carolina. Dr. Judson received his PhD from the University of Iowa where he studied composition acoustic composition with David Gompper and electronic music with Lawrence Fritts. He received his MM from the University of Florida where he studied with James Paul Sain, Paul Richards, and Budd Udell. His music has been performed in the Brazil, France, Germany, Italy, the UK, and throughout the United States, including the SEAMUS National Conference, Society of Composers, Inc., Electronic Music Midwest, the Festival of New American Music, the Santa Fe International New Media Festival, and was a featured artist at the EMIT festival in Tampa, Florida.

Konstantinos Karathanasis

Konstantinos Karathanasis is an electroacoustic composer who draws inspiration from modern poetry, artistic cinema, abstract painting, mysticism, Greek mythology, and the writings of Carl Jung and Joseph Campbell. His compositions have been performed at numerous festivals and received awards in international competitions, including

Bourges, Musica Nova, and SEAMUS/ASCAP. Recordings of his music are released by SEAMUS, ICMA, and Musica Nova. Konstantinos holds a Ph.D. in Music Composition from the University at Buffalo, and is currently an Associate Professor of Composition & Music Technology at the University of Oklahoma.

More info at: <http://129.15.77.24/oukon/>

Brian Kelly

Brian D. Kelly is an internationally performed composer of multimedia sound works that are often both acoustic and electronic in nature. Sound, visuals, poetry, and drama are freely combined in works that often explore social themes and challenge the status quo of Western ideals of culture, gender, theism, and sexuality.

Brian received his Bachelor of Arts in Music Education from Ottawa University (2011), his Master of Music in Composition from the University of Georgia (2013), and is currently pursuing his DMA in Composition at the University of Colorado Boulder. He has been the recipient of numerous commissions and awards, including the 2014 ATLAS Fellowship, the 2014 University Composers Collective composition award at the University of Utah, and first place in the 2012 Southeastern Composers League graduate student composition competition.

Brian's preferred methods of sound and video generation include ProTools, SuperCollider, MaxMSP/Cyclops, Sibelius, Logic, Reason, and Adobe Premiere. He currently lives in Boulder, CO, United States.

Steven Kemper

Steven Kemper (www.stevenkemper.com) creates music for acoustic instruments, instruments and computers, musical robots, dance, video, and networked systems. His compositions have been performed by the Boston Modern Orchestra Project, NOW Ensemble, and the Grupo Sax-Ensemble, and presented at SMC, ICMC, SEAMUS, SIGCHI, 12 Nights, Third Practice Festival, Pixilerations, American Composers Alliance Festival of American Music, and the Seoul International Computer Music



Festival. In 2010, he won the ICMA 2010 Student Award for Best Submission for *Shadows no. 5*, part of a collaborative series of pieces for belly dance, electroacoustic music, and RAKS system. Steven's research has been presented at ICMC and KEAMSAC, and published in *Organized Sound*. He is a co-founder of Expressive Machines Musical Instruments, a musical robotics collective, and co-designer of Movable Party, a bicycle-powered system for interactive electroacoustic music. Steven received a Ph.D. in composition and computer technologies from the University of Virginia, an M.M. in composition from Bowling Green State University and a B.A. in music from Bowdoin College. He is currently Assistant Professor of Music Technology and Composition in the Music Department at the Mason Gross School of the Arts at Rutgers, The State University of New Jersey.

Evan Kent

Evan Phoenix Kent (b. 1994) is a composer, hornist, and sound artist from Little Rock, Arkansas. He works in the realms of concert music composition, inter-media arts, digital electronics, and classical and contemporary performance. He is heavily influenced by early music, industrial music, early religion, and the music of human speech. He is fascinated by soundscapes and acoustic ecology, having made field recordings across the United States. He is also currently researching and composing as part NYU's CityGram team, headed by Tae Hong Park, which has developed a platform for locative sonification based on audio feature vectors extracted from urban spaces.

Seung-Hye Kim

Seung-Hye Kim is a composer and pianist whose interests include acoustic and electroacoustic music, musical gestures, and performative agency. She has performed traditional and contemporary repertoire at various concerts and important conferences such as Seoul International Computer Music Festival and Florida Electroacoustic Music Festival. She has received awards from the Korean Electro Acoustic Music Society Competition and the Italy Percussive Arts Society Competition. Her music can be heard on the SEAMUS label (vol. 16). Seung-Hye Kim received a Ph.D. in Music Composition from the University of Florida, an MA in Electroacoustic music

composition from the Korean National University of Arts, and a BA in Piano Performance from the Seoul National University. For more information, visit www.kimtfirn.com.

Matthew Komelski

Dr. Matthew Komelski has been involved in the martial arts for more than 30 years, with blackbelt ranks in Chinese, Japanese, and Korean Arts. For the last twenty years his practice has focused increasingly on the Chinese internal arts, including Xinyi, Chen style Taijiquan and more recently Hunyuan Taijiquan. Following the work and teachings of Dr. Yang, Dr. Komelski offers a range of Taiji practices through his programs, including seated, standing, and lying down meditation, qigong movement, and Taiji choreography, as well as partner training and self-defense.

Keith Kirchoff

Pianist and composer Keith Kirchoff has performed throughout all of North America and much of Europe. A strong advocate for modern music, Kirchoff has premiered over 100 new works and commissioned over two dozen compositions. As part of his commitment to fostering new audiences for contemporary music, Kirchoff has appeared at colleges and universities across the United States as a lecture-recitalist. Kirchoff has won awards from the Steinway Society, MetLife Meet the Composer, the Foundation for Contemporary Arts, and was named the 2011 Distinguished Scholar by the SMSA. Specializing on works which combine interactive electro-acoustics with solo piano, Kirchoff's Electro-Acoustic Piano Tour has been presented in six countries, and the first album in the Electro-Acoustic Piano series was released in 2011 on Thinking outLOUD Records. He has also recorded on the New World, Zerx, Tantara, and SEAMUS labels. www.keithkirchoff.com • www.splice.institute • originalgravitymusic.org

Keith Kothman

Keith Kothman is a composer and sound artist, with performances and installations of his work having taken place at the International Computer Music Conference; Society for Electro-Acoustic Music in the United States; University of Minnesota Spark



Festival; Indianapolis Museum of Contemporary Art; Bowling Green New Music and Art Festival; Electronic Music Midwest; Richmond Third Practice Festival; the Society for Electro-Acoustic Music in Sweden; InteractivA '03 at MACAY: Museo de Arte Contemporáneo Ateneo de Yucatán, Merida, Mexico; and Videoformes International Multimedia and Video Arts, Clermont-Ferrand, France; Kothman was awarded an Honorable Mention for Interludes at the 31st annual Bourges Electroacoustic Music competition, and recordings of his music are available on the Capstone, Cambria and New Albany labels. He is an associate professor of composition and technology, and coordinator of undergraduate programs in music, at Ball State University. More information is at keithkothman.com.

Mikel Kuehn

The music of American composer Mikel Kuehn (b. 1967) has been described as having “sensuous phrases... producing an effect of high abstraction turning into decadence,” by New York Times critic Paul Griffiths. A 2014 Guggenheim Fellow, he has received awards, grants, and residencies from ASCAP (Student Composer Awards), the Barlow Endowment, BMI (Student Composer Award), the Banff Centre, the Chicago Symphony Orchestra (First Hearing Prizes), Composers, Inc. (Lee Ettelson Award), the Copland House (Copland Award), Eastman (Howard Hanson and McCurdy Prizes), the League of Composers/ISCM, the MacDowell Colony, the Salvatore Martirano Memorial Composition Competition (honorable mention), the Ohio Arts Council (Individual Excellence Awards), the Luigi Russolo Competition (finalist), and Yaddo. His works have been commissioned by the Anubis Saxophone Quartet, the Civic Orchestra of Chicago, Ensemble 21, Ensemble Dal Niente, Flexible Music, violist John Graham, clarinetist Marianne Gythfeldt, cellist Craig Hultgren, guitarist Dan Lippel, Perspectives of New Music, pianist Marilyn Nonken, Selmer Paris, and the Spektral Quartet, among others. In March of 2013, six of his works were featured at the Vienna Saxfest held at Konservatorium Wien Privatuniversität.

Professor of Composition at Bowling Green State University, Kuehn was director of the MidAmerican Center for Contemporary Music (MACCM), the

annual New Music Festival and the Music at the Forefront concert series from 2007 through 2010. He holds degrees from the Eastman School of Music and the University of North Texas. Kuehn is currently working on a solo CD for the New Focus label; other recordings of his works are available on ACA Digital, Centaur, Erol, ICMA, and MSR Classics Perspectives of New Music/Open Space.

www.mikelkuehn.com

L2Ork

Named as one of the top eight research projects at Virginia Tech (DCist, 2014), a contemporary intermedia ensemble Linux Laptop Orchestra (L2Ork), thrives upon the quintessential form of collaboration found in the western classical orchestra and its cross-pollination with increasingly accessible human-computer interaction technologies for the purpose of exploring expressive power of gesture, communal interaction, discipline-agnostic environment, and the multidimensionality of arts.

L2Ork, founded by Dr. Ivica Ico Bukvic in May 2009, and since 2014 co-directed with Dr. Charles Nichols, is part of the interdisciplinary initiative by the Virginia Tech Digital Interactive Sound & Intermedia Studio (DISIS) and the Institute for Creativity, Arts, and Technology. As the world's first Linux-based laptop orchestra incorporating extensive study of gesture and Taiji choreography L2Ork offers optimal infrastructure for creative research at minimal cost. By providing a seamless integration of arts and sciences it is in part designed to bridge the gap between STEM and the Arts, with particular focus on K-12 education. 2ork.music.vt.edu

Peter Van Zandt Lane

Peter Van Zandt Lane's music has been praised by critics for its “depth, character, and pleasing complexity” (Boston Musical Intelligencer), and has been recognized for its “appeal to musicians and audiences, no matter their personal musical aesthetic” (Asymmetry Music Magazine). He has composed for orchestras, wind ensembles, choirs, and chamber ensembles, and often integrates live electronics into his works. Tapping into a visceral sense of rhythm and momentum, Peter's music often explores the tension between the organic



and the mechanical, combining an eclectic range of both classical and vernacular influences. His recent full-length ballet, *HackPolitik*, explores the unique topic of cyber-dissidence through live music, dance, and electronics. Bringing contemporary music and dance into the cross-section of art, technology, and politics, HackPolitik has been featured in Boston Magazine, Forbes, and BBC radio, and was hailed by critics as “angular, jarring, and sophisticated . . . very compelling . . . Ballet needs live music, and this one offered it at the highest level.” (Boston Musical Intelligencer). The NYC premiere of HackPolitik was a New York Times Critic's Pick, praised as “refreshingly relevant.” (The New York Times). Peter holds PhD and Masters degrees in Music Composition and Theory from Brandeis University, and a Bachelors degree from the University of Miami Frost School of Music. He is currently a Visiting Assistant Professor of music theory and composition at the University of Florida.

Ryan Laney

Ryan Laney (b. 1989) is a composer of acoustic and electroacoustic concert music. His works have been heard at the soundSCAPE music festival in Italy, the UPBEAT festival in Croatia, and numerous venues throughout the United States. As a pianist, he has performed in a wide variety of musicals, operas, orchestras, jazz ensembles, rock bands, and chamber ensembles.

Ryan holds a bachelor's degree with honors in physics from the College of William & Mary and is currently pursuing his doctorate in composition at the University of Texas at Austin. His teachers have included Burton Hatheway, Sophia Serghi, Greg Bowers, Yevgeniy Sharlat, Dan Welcher, Russell Pinkston, Donald Grantham, and Bruce Pennycook.

Yoon-Ji Lee

Yoon-Ji Lee is a Korean composer based in New York. She has been creating music based on non-linear structure with a powerful focus on quickly transforming gestures, textures, harmonies, tone colors, and/or electronics. She also continuously experiments with contextual improvisation (composing certain materials and frameworks for performers to improvise with) as well as intercultural musical sources. Her works have been performed

in Korea and around the U.S., by ensembles including JACK Quartet, MIVOS Quartet, Argento Ensemble, International Contemporary Ensemble, Kammerensemble Neue Musik Berlin, String Noise, Either/Or, Talea Ensemble, and many others. Lee also has many current composition commissions, for Washington Square Contemporary Society and ensemble mise-en, as well as for several solo/duo performers. In 2013, Lee received the Jane Geuting Camp Fellowship from Virginia Center for the Creative Arts and, in 2012, the Patsy Lu Award, from International Alliance of Women in Music. Previously she was awarded the Henry M. MacCracken Fellowship, which funded her PhD studies at NYU. Lee has participated in artist residencies at Atlantic Center for the Arts, where she worked with Elliott Sharp, VCCA, and Brush Creek Foundation for the Arts. Lee is currently working to complete her PhD in composition at NYU under the guidance of Elizabeth Hoffman and Louis Karchin, and did her Masters with Robert Cogan at New England Conservatory after she finished her undergraduate study at Ewha Women's University in Korea.

Elainie Lillios

Elainie Lillios's music reflects her fascination with listening, sound, space, time, immersion and anecdote. Her compositions include stereo, multi-channel, and Ambisonic fixed media works, instrument(s) with live electronics, collaborative experimental audio/visual animations, and installations.

She was granted a 2013-14 Fulbright Scholar award (Greece), with other accolades including First Prize in the 2009 Concours Internationale de Bourges, Areon Flutes International Composition Competition, and Electroacoustic Piano International Competition; recognition recognition from Prix Destellos, Concurso Internacional de Música Electroacústica de São Paulo, Concorso Internazionale Russolo, Pierre Schaeffer Competition, and La Muse en Circuit; Grants/commissions from INA/GRM, Réseaux, ICMA, La Muse en Circuit, ASCAP/SEAMUS, Ohio Arts Council, and National Foundation for the Advancement of the Arts.

Elainie's acousmatic music is available on Entre Espaces, produced by Empreintes DIGITALes. Other pieces appear on Centaur, MSR Classics,



StudioPANaroma, La Muse en Circuit, New Adventures in Sound Art, SEAMUS, Irritable Hedgehog and Leonardo Music Journal. elillios.com

Kuei-Fan Lin

A native of Taiwan, Kuei-Fan Lin has recently completed her doctoral degree in composition at the University of Arizona in August, 2014, under the tutelage of Dr. Craig Walsh. Her pieces have been selected from numerous adjudicated conferences and festivals, among them: the Society for Electro-Acoustic Music in the United States (SEAMUS) National Conference (2015, 2014, 2012), the International Computer Music Conference (ICMC) (2014, 2013, 2012, 2011), New York City Electroacoustic Music Festival (2014, 2013), the 6th International Competition of Electroacoustic Composition and Visual-music of Foundation Destellos (2013), Electronic Music Midwest (EMM) (2012), and the 3rd Shanghai Conservatory of Music International Electronic Music Week (2011). Her pieces were also the finalists of the 8th & 10th International Composition Competition "Città di Udine", and have been selected to be included in the CD of the competition dedicated to electro-acoustic compositions (8th & 10th Editions).

Stephen Lucas

Stephen Lucas is a composer, intermedia artist, and current doctoral candidate at the University of North Texas with the Center for Experimental Music and Intermedia (CEMI). He is best known for combining starkly cartoonish and abstract elements in computer generated audio/video works; he also writes works involving live instrumentalists and interactive electronics. His compositions have been performed throughout the United States but he strives to embrace online audiences. His other major interests include horticulture, cybernetics, and metaphysics.

Eric Lyon

Eric Lyon is a composer and computer music researcher. His work focuses on articulated noise, spatial orchestration and computer chamber music. His software includes *FFTease* and *LyonPotpourri*, collections of audio objects written for Max/MSP

and Pd. He is the author of "Designing Audio Objects for Max/MSP and Pd", which explicates the process of designing and implementing audio DSP externals. In 2011, Lyon was awarded a Giga-Hertz prize from ZKM, resulting in the creation of the 43-channel computer music composition *Spirits*. His 124-channel composition "*The Cascades*" was recently premiered in the Cube at the Virginia Tech Center for the Arts. He has composed for such artists as The Biomuse Trio, Margaret Lancaster, The Noise Quartet, Ensemble mise-en, String Noise, Kathleen Supové, and Marianne Gythfeldt. Lyon has taught computer music at Keio University, IAMAS, Dartmouth College, Manchester University, and Queen's University Belfast. Currently, he teaches in the School of Performing Arts at Virginia Tech, and is a Fellow at the Institute for Creativity, Arts, and Technology.

Ryan Maguire

Ryan Maguire believes that through music we live more fully, feel more deeply, think more clearly, and connect more truly. His work persistently attempts to find hidden resonances in acoustic, poetic, and technological space. *At best* he hopes his music might catalyze transcendent, humane experiences sometime and somewhere. Failing that, he hopes it will at least comfort, inspire, or intrigue. Currently a Ph.D. student in Composition and Computer Technologies at the University of Virginia, Ryan grew up in Wisconsin where he earned his B.A. in Physics and Music. In the intervening years, he taught math and studied music late into the night while completing postgraduate degrees at the New England Conservatory and Dartmouth College in Composition and Digital Musics, respectively. In his free time you can usually find him eating vegan food or enjoying the great outdoors. To learn more, visit <http://ryanmaguiremusic.com>

Devin Maxwell

Composer Devin Maxwell's chamber music has been described as "amiably strident...clusters hammered insistently" by the New York Times and his orchestral works "a beautiful puzzle, with clusters fitting between plucks and pedals that build pyramid melodies" by the American Record Guide. He has recently been commissioned by mmm... (Tokyo), Bent Frequency (Atlanta), Ensemble



Dedalus (Montpellier), and the Deer Valley Music Festival Emerging Quartets and Composers Program (Utah). He is currently pursuing a Ph.D. in music composition at the University of Utah and is a graduate of the Cincinnati College-Conservatory of Music and California Institute of the Arts.

David McDonnell

David McDonnell is a composer, computer music programmer and jazz saxophonist. A Chicago native, McDonnell currently resides in Cincinnati, where he teaches Computer Music, Recording and Arranging at The University of Dayton and laptop music at The University of Cincinnati – College Conservatory of Music (CCM). McDonnell received his Doctorate in Composition from CCM in 2012, where he studied with Joel Hoffman and Mara Helmuth. Although mainly a spectralist in compositional practice, McDonnell attempts to fuse these techniques with the rhythms and melodic approaches gleaned from his years in Chicago as a professional jazz and rock musician.

Recent premiers of his multi-media chamber music include *In a Clearing*, for solo trombone, *computer and accompaniment at The Colburn School in Los Angeles* (Winter 2013) and *Æpse for solo cello and computer* at Constellation in Chicago (Autumn 2013). In the summer of 2011, he received a fellowship to attend the Music X Festival in Blonay, Switzerland, which was curated by the Eighth Blackbird Ensemble. It was here that his chamber trio *Islands in a Sea of Light* was premiered. This past winter, McDonnell was a speaker at a festival held for the computer music programming software RTcmix at CCM, where he presented his work modeling and manipulating Auditory Illusions as described by the cognitive psychologist Diana Deutsch.

Chris Mercer

PhD, University of California, San Diego

Christopher Mercer is a composer of electroacoustic music, combining lo-tech analog techniques with extensive digital signal processing. He is a specialist in multi-channel audio and spatialization. As a composer of acoustic music, Mercer has focused on extended instrumental techniques, modifying

conventional instruments, and instruments of the composer's own design and, most recently, combining this approach with real-time electronics and spatialization. He is the author of articles on musical aesthetics and composition and has had residencies at Experimentalstudio SWR in Freiburg, Künstlerhaus Schloss Wiepersdorf, and Sound Traffic Control in San Francisco. Mercer's principal teachers were Peter Otto and Roger Reynolds, electronic music, and Chaya Czernowin and Chinary Ung for instrumental music. More information available at his personal website.

Jennifer Merkwowitz

Jennifer Bernard Merkwowitz is Associate Professor of Music Theory and Composition at Otterbein University in Westerville, Ohio, where she teaches composition, theory, aural skills and electronic music. She received her MM and DMA in Composition from the University of Cincinnati College-Conservatory of Music, and she holds a BA in Music and a BS in Computer Science from the University of Richmond. She has also been on the faculty at the College of William and Mary in Virginia and Interlochen Arts Camp in Michigan. Jennifer is a composer and pianist whose diverse inspirations include liturgical chant, basketball games, and the growth patterns of plants. Her music has been performed in national and international venues, including the International Computer Music Conference, the International Tuba/Euphonium Conference, and the 60X60 Athena Mix (2011). Her recent piece *And The Dish Ran Away with the Spoon* appears on percussionist Joseph Van Hassel's album on Soundset Recordings.

Caroline L. Miller

In June of 2013, Caroline L. Miller embarked on a research cruise in the Philippine Sea, sailing from Taiwan to the Republic of Palau as part of an oceanographic science party. The class politics of ship life, hours of work in the tropical humidity, and adventures on deck alone at night changed her attitudes toward music and life. Since that time, much of C.L.M.'s research has been devoted to the social study of aesthetics, feminist and radical critiques of music history, and tactile aspects of composition. Since 2012, she has organized and curated annual concerts at the Birch Aquarium at



Scripps. Her music is performed across the United States; recently she has enjoyed performances by ensembles such as Wild Rumpus, the Lyrus Quartet, and the Inoo-Kallay Duo. Elliptic for percussion, piano and electronics is published on populist records.

C.L.M. recently began the Ph.D. program in music composition at UC San Diego, after completing the master's degree at UCSD in June 2014.

Scott Miller

Scott L. Miller's music has been described as 'inspir[ing] real hope & optimism for the future of electroacousticmusic.' (SimonCummings,5against4.com). He is a Fulbright Scholar and has twice been named a McKnight Composer Fellow (2001, 2013). His music is recorded on New Focus Recordings, Innova, Eroica, CRS, rarescale and SEAMUS labels, and published by ACA (American Composers Alliance), Tetractys, and Jeanné. He is a Professor of Music at St. Cloud State University, and President of the Society for Electro-Acoustic Music in the U.S. www.scottmiller.net

Jason Mitchell

Jason H. Mitchell is a classically trained guitarist and a composer of instrumental and electro-acoustic music. Currently based in upstate New York, he grew up in the lower Rio Grande Valley of south Texas, where the rich cultural heritage of the Texas-Mexico border region influences much of his music. Jason earned a DMA from the University of Illinois and has worked as the studio technician for the University of Texas Film Scoring Studio under the direction of Bruce Pennycook as well as the studio director for the University of Illinois Unit 1 Electronic Music Studio. For more information, please visit jholtmusic.com

David Mooney

Born in the United States at the crest of the Baby Boomer wave, Mooney continues to surf through life with open eyes and ears. Filtered and processed, this sensory input has emerged over many years in various visual and aural forms that have been shown or heard in venues on most of Earth's populated continents. Since retiring from his day job, Mooney

does much of his environmental scanning from the seat of his bicycle, up and down the hills of Pittsburgh PA, USA. Details: opaquemelodies.com

Jeff Morris

Jeff Morris is PerfTech Studio Director in the Texas A&M University Department of Performance Studies. He curates the Fresh Minds Festival of audiovisual art and Weblogmusic, a platform for time-shifted free improvisation ensembles. His work explores the impact of technological mediation on the human experience. It has been presented at the International Society for Improvised Music conference, the Milano Triennale museum, the Austin Museum of Art, and the Bonk festival of new music. He studied at the Florida State University and the Center for Experimental Music and Intermedia (CEMI) at the University of North Texas.

Michael Musick

Michael Musick is a media artist, technologist, composer, performer and improviser. His current work focuses on the creation of and research into interactive performance systems and their connections to ecosystems and soundscapes. The *Sonic Spaces project*, which is a series of dynamic interactive sonic ecosystem compositions, is the most recent example of this work.

Michael has been a Music Technology Ph.D. student at NYU since 2012 and is part of the Computer Music Group at MARL. Prior to NYU, he earned an M.A. in Media Arts from the University of Michigan, where he began his work with performance systems. In addition, he studied creative improvisation and multi-media performance. Michael has a strong background in tuba performance and recording arts. He holds performance degrees from The University of Southern California (M.Mus '09) and The University of Colorado (B.Mus '07). Originally from Arvada, Colorado, Michael is a lover of the mountains, snow, and wandering among the aspen or pine trees.

For more information please visit his personal site at michaelmusick.com.



Anne Neikirk

Anne Neikirk's compositional interests include electronic, vocal, sacred, and folk music and their intersection with the natural world. She has received commissions from various solo and chamber performers as well as the Women's Sacred Music Project in Philadelphia. Her works have been performed at festivals and conferences including the College Music Society National Conference, the Philadelphia Fringe Festival, the University of Central Missouri New Music Festival, the North American Saxophone Alliance Biennial Conference, the Amphibian Series in New York, and several regional and national SCI conferences. Anne is a recipient of the 2012 Presser Award and the EAMA Michael Iovenko Composition Fellowship. She received her DMA in composition from Temple University in 2013. She holds a Master of Music degree from Bowling Green State University and a Bachelor of Arts degree in music from Hamilton College. She currently serves on the music theory faculty at the University of Delaware.

Jon Christopher Nelson

Jon Christopher Nelson (b. 1960) is currently a Professor at the University of North Texas where he serves as an associate of CEMI (Center for Experimental Music and Intermedia) and also the Associate Dean of Operations. Nelson's electroacoustic music compositions have been performed widely throughout the United States, Europe, Asia, and Latin America. He has been honored with numerous awards including fellowships from the Guggenheim Foundation, the National Endowment for the Arts, and the Fulbright Commission. He is the recipient of Luigi Russolo and Bourges Prizes (including the Euphonies d'Or prize) and recently was recognized as the recipient of the International Computer Music Association's 2012 Americas Regional Award. In addition to his electro-acoustic works, Nelson has composed a variety of acoustic compositions that have been performed by ensembles such as the New World Symphony, the Memphis Symphony, the Brazos Valley Symphony Orchestra, ALEA III, and others. He has composed in residence at Sweden's national Electronic Music Studios, the Visby International Composers Center and at IMEB in Bourges, France. His works can be heard on the Bourges, Russolo

Pratella, Innova, CDCM, NEUMA, ICMC, and SEAMUS labels.

Nicholas Nelson

Nicholas R. Nelson has been composing vocal, choral, orchestral and experimental music since his early years, receiving his international premiere at the Edinburgh Fringe Festival in 1998. After moving to Brooklyn to study at Brooklyn College and with Morton Subotnick and George Brunner, Nick then joined the City University of New York Graduate Center as a doctoral student, studying with Douglas Geers and Jason Eckardt, and remains engaged as a lecturer in Music Technology at Brooklyn College.

Nelson's music has been performed all over New York City—in addition to performances in the Netherlands, Germany, Austria, Prague and Hong Kong. Performers who have collaborated with Nick include violinist Sarah Saviet, trombonist David Whitwell, organist Cliona Shanahan, and flautist Katie Cocks, and he is engaged for future endeavors with ensembles in the UK, the Netherlands and Germany.

Charles Nichols

Composer, violinist, and computer music researcher, Charles Nichols is an Assistant Professor at Virginia Tech, and has earned degrees from Eastman, Yale, and Stanford. He has received support from the NEA, NSF, New Music USA, and Prop Foundation, and recognition from the National Academy of Music, La Fundación Destellos, Bourges, ASCAP, and the Montana Arts Council. Recently he was a visiting scholar, at the Sonic Arts Research Centre at Queen's University Belfast, N. Ireland, a visiting composer, with the Namaste Ensemble in Città di Castello and Rome, Italy, and a resident, at the Ucross and Brush Creek Artist Retreats, in Wyoming. His recent premieres include *Nicolo*, *Jimi*, and *John*, a concerto, for amplified viola, interactive computer music, and orchestra, three movements, inspired by the virtuosity of Paganini, Hendrix, and Coltrane, and *Sound of Rivers: Stone Drum*, a multimedia collaboration, with sonified data, electric violin, and computer music, accompanying narrated poetry, dance, animation, and processed video, based on scientific research into how stoneflies navigate throughout their lifecycles, by the sound of rivers.



John Nichols III

John Nichols III is a composer of intriguing music that is created with a wide diversity of sonic phenomena melded into an expressive form. Nichols has received international recognition for his electroacoustic works and has had compositions performed at events such as Gaudeamus Muziekweek, International Computer Music Conference, and Society for Electroacoustic Music in the United States – among others. His compositions are honored with awards such as the 2014 Luigi Russolo Grand Prix and First Luigi Russolo Prize (France, Spain), First Prize Absolute in the International Composition Competition “Città di Udine” Tenth Edition “Electro-acoustic music” section (2014, Italy), First Prize in the 2014 ASCAP/SEAMUS Student Composer Commission Competition (USA), First Prize in the Workshop on Computer Music and Audio Technology (WOCMAT) International Phil Winsor Electroacoustic Music Young Composers Awards (2013, Taiwan), and winner of the 2013 Conlon Music Prize for Disklavier Plus (Netherlands). Nichols’ works have also received recognition from the Prix Destellos (2013, Argentina), Métamorphoses Competition (2012, Brussels), and the Morton Gould ASCAP Young Composer’s Competition (2011). His latest compositions are published on Musique & Recherches, SEAMUS, Monochrome Vision, and ABLAZE Records. Nichols recently served as an Associate Artist at Atlantic Center for the Arts with master artist Professor Jonty Harrison as is currently active as a Fellow at the Virginia Center for the Creative Arts. He studies advanced studio techniques with Professor Scott A. Wyatt and composition with Professor Sever Tipei at the University of Illinois, Urbana-Champaign, where he won the Fourteenth Annual 21st Century Piano Commission Competition.

Nichols’ compositions have been broadcasted nationally and internationally on radio stations including WNUR FM (Evanston, IL), KUAC FM (Fairbanks, AK), WEFT FM (Champaign, IL), WOBC FM (Oberlin, OH), VPRO FM (Netherlands), RTÉ Lyric FM (Ireland), FM Barcelona, and Radio France.

Ryan Oliver

Ryan Olivier (b. 1985) grew up in the southern United States. Born in New Orleans and moving

shortly thereafter, he eventually returned to his birthplace to pursue music composition at Loyola University’s College of Music with James Walsh. Upon graduation he journeyed north to study at Temple University where he is currently a doctoral candidate studying with Maurice Wright. Ryan has also studied with Samuel Adler in Berlin and with Kevin Puts and Robert Aldridge at the Brevard Music Center. His concert works have been performed by Blair McMillen, the Momenta Quartet, the Cygnus Ensemble, and the New Orleans New Music Ensemble. As a member of Melos Music, ensemble39 and members of Nonsemble 6 have performed his works on the annual new music concert and both works have been released as part of the Melos Music CD series.

In addition to his concert works, his various interests have led him to work with a wide array of media including electronics, video, and dance. His work has been featured at the New Voices Festival at the Catholic University of America, Miami’s 12 Nights Festival, the Cybersounds Concert Series, the Electro-acoustic Barn Dance, POD’s Mixed Drinks, the Byte Gallery at the Studio 300 Festival, Texas A&M’s Fresh Minds Festival, Pennsylvania State University’s Crosscurrents Festival, Society of Composers, Inc. (SCI) National and Regional Conferences, the National Student Electronic Music Festival (N_SEME), the New York City Electro-acoustic Music Festival (NYCEMF), Electronic Music Midwest (EMM), the Society for Electro-Acoustic Music in the United States (SEAMUS) National Conference, the International Workshop on Computer Music and Audio Technology (WOCMAT) in Taiwan, the International Computer Music Conference (ICMC) in the United Kingdom, and the Punto y Raya Festival in Reykjavik, Iceland. While Ryan enjoys composing for both traditional concert ensembles and fixed media, he is currently working to incorporate real-time interaction between live performers and visualized electronic music to create interactive multimedia works. www.ryanolivier.com

Jaime E. Oliver La Rosa

Jaime Oliver (Lima 1979) is a Peruvian computer music composer, performer, and scholar working at the intersections of musical instruments and open works. He obtained a PhD from UCSD and is currently Assistant Professor of composition at



NYU. He has performed extensively in south and north America and Europe and collaborated with several composers, improvisers and artists in a field of action that spans sound performance and installation, composing and performing music, and programming open source software. His Silent Drum and MANO controllers use computer vision techniques to continuously track and classify hand gestures.

Some recognitions include a Mellon Post-Doctoral Fellowship at Columbia University, scholarships and grants from the Fulbright Commission, the University of California, Meet the Composer and the Ministry of Culture of Spain, and composition and research residencies at ZKM and IRCAM. He obtained the 1st prize in FILE PRIX LUX 2010, a GIGA-HERTZ-PREIS 2010 special prize from ZKM and the 1st prize in the 2009 Guthman Competition from the Georgia Tech Center for Music Technology

Ryan Oliver

Ryan Olivier (b. 1985) teaches at Temple University and St. Joseph’s University in Philadelphia. He is currently a doctoral candidate at Temple University where he studies with Maurice Wright. His work has been featured at various festivals across the US as well as in various countries such as Iceland, Taiwan, and the UK. While Ryan enjoys composing for both traditional concert ensembles and fixed media, his current focus is incorporating real-time interaction between live performers and visualized electronic music. www.ryanolivier.com

Kevin Michael Olson

Kevin Michael Olson is an interdisciplinary artist who melds live performances with electronics. His eclectic influences include western art music, world music, and sound art.

He is currently finishing a Bachelor of Music degree at Colorado State University, where he won the 2014 Faculty Award for Academic Excellence in Music Theory and History. He has studied classical Horn performance with Milan Yancich at the Eastman School of Music, and Mathew Evans and Dr. John McGuire at Colorado State University.

Kevin holds the degrees of Bachelor of Science in Electrical Engineering from the University of

Rochester and Master of Science in Computer Engineering from Duke University. He holds three patents in the field of computer graphics, and helped design numerous graphical processing units (GPUs) that are used in computers and game consoles such as the Radeon series, Xbox 360, Xbox One, and Playstation 4.

Matthew Omahan

Born in Battle Creek, Michigan and raised in Gambier, Ohio, Matt Omahan began composing electronic music from the age of 12. His interest mostly started as a fascination with audio mixing boards, which seemed to offer hours of customization to live sound. After working with his first digital audio workstation, he soon realized that his interest was not in modifying existing sounds, but rather the creation of entirely sounds and textures that lacked earthly counterparts.

Matt’s main foci are acousmatic and improvised music. His studio music is often created with hardware synthesizers, then arranged after creating palettes of content. His improvised music focuses on microsounds and the extremes of register. Matt plays electronics and synthesizers in Wisseler, a quartet that also features saxophone, turntables, and visuals.

Matt graduated with honors from Mount Vernon High School in 2012. He currently studies Technology in Music and the Related Arts and Composition in the Oberlin Conservatory of Music and an Undecided Major in the College of Arts and Sciences.

Olga Oseth

Olga Oseth is a composer, sound designer, pianist and accompanist. Olga received her BM in Piano Performance and BA in New Media and Composition from St. Cloud State University. Her native country is Ukraine, where she started taking piano lessons at the age of 5 at a special music school for gifted students. Olga is a winner of several piano competitions and recipient of University of Oregon Music Scholarship. In 2012 was awarded Outstanding Music Student Award. Her previous teachers include Ludmila Civadic (piano), Dr. Carmen Wilhite (piano), Dr. Larissa Simanenкова (piano), Dr. Kristian Twombly



(composition/electroacoustic music) and Dr. Scott Miller (composition/electroacoustic music). Olga is attending University of Oregon and working towards her Master's Degree in Intermedia Music Technology. Miss Oseth is studying with Dr. Jeffrey Stolet and Dr. Chester Udell.

Hyeonhee Park

Hyeonhee Park is a composer and percussionist who has studied traditional Korean percussion at Korea National University of Arts, in Seoul, and electroacoustic music composition and sound programming at Tokyo University of the Arts. Her pieces have been selected for performance at international conferences and festivals, SEAMUS 2015 (US), ICMC 2014 (Greece), Composit New Music Festival 2014 (Italy), CCMC 2015/2014(Japan).

John Park

John Park is an algorithmic artist who works in the space between data and physical media. As a Career Instructor of Digital Arts at the University of Oregon and a co-founder of the interdisciplinary arts collective Harmonic Laboratory, recently Park has been leveraging data feeds into screen based and installation pieces, as well as an instructional device in the classroom.

Park has exhibited nationally and internationally at: KISS 2013 (Belgium, Brussels), Hult Center (Eugene, OR), Alaska Dance Theater (Anchorage, AK), University of Virginia (Charlottesville, VA), Western Michigan University (Kalamazoo, MI), etc.

Sunglae Park

Sunglae Park was born in the Republic of Korea, started music as a senior in high school, and now attends the undergraduate program at the Peabody Institute, studying Recording Art and Computer Music with Dr. Boyle.

Tae Hong Park

Tae Hong Park has worked in the area of digital communication systems and musical keyboards at the LG Central Research Laboratory in Seoul, Korea (1994~1998). He holds B.Eng., M.A., M.F.A., and Ph.D. degrees from Korea University, Dartmouth

College, and Princeton University and his current interests are in composition, research in multi-dimensional aspects of timbre, signal processing, computer-aided music analysis, cyber-physical systems, and human-computer interaction. His music has been performed in various locations including Australia, Brazil, Canada, China, France, Germany, Holland, Hungary, Ireland, Mexico, South Korea, Slovenia, Sweden, UK, and USA. He organized the 2006 ICMC conference, has served two terms as President of International Computer Music Association; is Chief Editor of Journal SEAMUS and Editorial Consultant for Computer Music Journal. He is Associate Professor in Music Technology and Director of the Composition program at NYU. He is author of "Introduction to DSP: Computer Musically Speaking" published in 2010.

Chris Peck

Chris Peck is a composer, computer musician, and improviser who often collaborates with contemporary dance and theater artists, including David Dorfman, John Jasperse, RoseAnne Spradlin, Jeanine Durning, Mark Jarecki, Abby Yager, Ming Yang/Dance Forum Taipei, and Beth Gill. Recently he has collaborated on numerous pieces with choreographer Milka Djordjevich, including her solo at The Chocolate Factory Theater in NYC last April. Peck performs as an improviser and multi-instrumentalist with Crystal Mooncone along with Jon Moniaci and Stephen Rush. The trio recently completed a California tour including performances at CCRMA (Stanford) and the Center for New Music in San Francisco as well as workshops with music and dance students at UC Santa Barbara. Peck collaborated with Deke Weaver and Jennifer Allen on Land of Plenty in 2008-2010, and made music for two installments of Weaver's Unreliable Bestiary: Elephant in 2010-11 (performing in the premiere at the Stock Pavilion in Urbana as well as subsequent iterations at the Sundance Film Festival and Salt Lake Arts Center) and Wolf in 2013. Chris is currently working on several projects with Brussels-based choreographer Eleanor Bauer, including a recently premiered commission for the "This Is Not A Pop Song" project of the Belgian new music ensemble Ictus. He is also a Ph.D. candidate in Composition and Computer Technologies at the University of Virginia.



Sylvia Pengilly

Sylvia Pengilly has always been fascinated by the correlation between what the ear hears and what the eye sees. Because of this, many of her works integrate both musical and visual elements.

Mathematics and physics, including Chaos Theory, Quantum Mechanics, and Superstrings, are of particular interest and frequently provide the basis for her works. These have been presented both nationally and worldwide at several festivals, including many SEAMUS National Conferences, the Medi@terra festival, ICMC, the "Not Still Art" Festival, the "Visual Music Marathon," and recently had a screening of one of her videos at the Downtown Film Festival in Los Angeles.

She was formerly professor of theory and composition in the College of Music at Loyola University, New Orleans, where she also founded and directed the electronic music composition studio.

She presently lives in Atascadero, California, where she composes music and creates "Visual Music" videos.

Sean Peuquet

Sean is a composer and installation artist. He presents his work a couple times a year, both nationally and internationally at events that are often referred to using acronyms: SEAMUS, ICMC, NYCEMF, SCI, TES, and EMM. His primary research interests concern self-reflexive listening practices, the dialectics of space and place, convergent algorithms for generative musical systems, and HCI using position-sensing technologies. He recently completed a 2-year Visiting Professorship in Digital Arts at Stetson University, and earned his Ph.D. from the University of Florida. He has a Masters in Electro-Acoustic Music from Dartmouth College, and holds a B.A. in Music and Psychology from the University of Virginia.

Mark Phillips

Ohio University Distinguished Professor Mark Phillips won the 1988 Barlow International Competition for Orchestral Music, leading to collaborations with conductor Leonard Slatkin.

More recently (November 2013), the Peabody Modern Orchestra opened its inaugural concert with a performance of his *Shadow Dancing*. Earlier in 2013, his *String Quartet No. 2* was performed at the Festival Internacional de Música de Bogotá. Following a national competition, Pi Kappa Lambda commissioned him to compose a work for their 2006 national conference in San Antonio. Commissioned for a 2005 premiere in Memphis, his *Dreams Interrupted* has received numerous subsequent performances in Pittsburgh, Duluth, Baltimore, Dallas, Louisville, South Bend, Birmingham (AL), and Athens (Ohio). His music has received hundreds of performances throughout the world—including dozens of orchestra performances by groups such as the St. Louis Symphony Orchestra and the Cleveland Orchestra—and has been recorded by Richard Stoltzman and the Warsaw Philharmonic Orchestra, the Lark Quartet, and several solo artists.

Russel Pinkston

Russell Pinkston currently resides in Austin, Texas, where he is Professor of Music Composition and Director of Electronic Music Studios at The University of Texas at Austin. He holds degrees from Dartmouth College (BA 1975) and Columbia University (MA 1979, DMA 1984). He is active both as a composer and as a prominent pedagogue and researcher in the field of computer music. His compositions span a wide range of different media, including symphonic, choral, and chamber works, electronic music for modern dance, and interactive performance pieces. While the primary focus of his research has been in the area of real-time DSP and interactive systems, his numerous examples and user-interface software for Csound are also renowned. He has received a number of significant honors, including a Guggenheim Fellowship, the Charles Ives Fellowship from the American Academy and Institute of Arts and Letters, and a senior Fulbright Fellowship to Brazil. He is a founding member and former President of the Society for Electro-Acoustic Music in the U. S., and has served as an ICMA Regional Representative for the Americas. His music is recorded on Boston Skyline, Centaur, Folkways, Koch International, New Dynamic, and Summit Brass Records, and published by E. C. Schirmer, King's Crown Press, and Rein Free Press (ASCAP).



Mike Polo

Mike Polo (b. 1985) is currently working on a Ph.D. in Music Composition at the University of Florida and just recently completed a Master of Science in Management as well while at the University of Florida. He received his Master of Music degree in Composition from George Mason University in 2011 after completing a Bachelor of Music in Composition from Rowan University in May 2009. Michael began his formal composition training in 2002 at the Settlement School of Music in Philadelphia, PA. Michael has studied composition with; Roberto Pace, Harold Oliver, Dennis DiBlasio, Mark Camphouse, Jesse Guessford, James Paul Sain, Paul Richards, and Paul Koonce.

Michael's research interests are on physiological reactions to music. Beginning in Fall 2014, Michael will begin an empirical study on the physiological effects of listening to contemporary.

Justin Michael Porter

Justin Michael Porter is a second year graduate student in Computer Music Composition at the Peabody Conservatory in Baltimore, Maryland. A current student of Dr. Geoffrey Wright, Justin has written and had performances of both acoustic and electronic music throughout the United States, and more recently, in Europe. For his current graduate studies, Justin is focusing on composing interactive computer music that combines human performance, score following, and advanced forms of synthesis using Supercollider and MaxMsp. Future projects include a piece for ballet dancer, soprano and interactive electronics, and a 5-week long computer music composition workshop at the Baltimore School for the Arts.

Michael Pounds

Michael Pounds began his career as a mechanical engineer, with a BS from Ohio University. After employment at the NASA Lewis Research Center, he returned to the academic world to study music composition with a focus on computer music and music technology. After undergraduate music studies at Bowling Green State University he earned graduate degrees in music composition from Ball State University, the University of Birmingham in

England, and the University of Illinois, where he completed his doctorate. His creative work includes compositions for fixed audio media, live interactive computer music, and collaborative intermedia projects. His awards include the ASCAP/SEAMUS Student Commission Award, a Residence Prize at the Bourges International Electroacoustic Music Competition, a Rotary Foundation Ambassadorial Scholarship for studies in England, and residencies at the MacDowell Colony and I-Park. His work has been presented throughout North America and Mexico, Europe, Asia, Australia and New Zealand. He was a co-host of the 2005 National Conference of the Society for Electro-Acoustic Music in the U.S. and the 2014 National Conference of the Society of Composers, Inc. Michael is the Assistant Director of the Music Media Production program at Ball State University, where he teaches composition, acoustics, music perception, recording, and computer music.

Michael's research interests are on physiological reactions to music. Beginning in Fall 2014, Michael will begin an empirical study on the physiological effects of listening to contemporary.

Christopher Poovey

Christopher Poovey aspires to immerse his audience in a world of his own creation. He has been recognized by The Dallas Symphony Orchestra, Voices of Change New Music Ensemble, National Music Teachers Association, the National Student Electronic Music Event, New York Electronic Music Festival, and Texas Music Teachers Association for his work. He is currently pursuing a BM in composition with a minor in electronic music at Indiana University Jacobs School of Music and has studied with distinguished composers such as Sven-David Sandström, Claude Baker, and Jeffery Hass.

William Price

William Price's music has been performed in South America, Asia, and throughout the United States and Europe. His works have been featured at such events as the World Saxophone Congress, the International Trumpet Guild Conference, the Música Viva Festival in Portugal, the Musinfo Art and Science Days in France, the National Flute Association Conference (U.S.), and the Nanyang Academy of Fine Arts Chamber Music Festival in Singapore. Dr.



Price serves as Associate Professor of Music at the University of Alabama at Birmingham, where he teaches courses in music theory and composition. For more information, please visit his website at: www.williampricecomposer.com.

Miller Puckette

Miller Puckette won Putnam and NSF fellowships to study mathematics at MIT and Harvard, where he finished his Ph.D. in 1986. From 1979 through 1986 he also worked on real-time techniques for live music performance at the MIT Media Lab. He then joined IRCAM where he wrote Max, a seminal computer music environment. In 1994 Puckette joined UCSD where he is now professor and chair of the music department, and is developing a software environment for computer music named Pure Data. In 2008 Puckette was recognized with the SEAMUS Award.

Deovides Reyes III

Dennis Deovides Reyes III is currently pursuing his doctorate degree in music composition in the University of Illinois at Urbana-Champaign under Scott A. Wyatt. Dennis has been a participant for three consecutive years for the National Conferences of the Society of Electro-Acoustic Music in the United States (SEAMUS). His piece *Fireworks* was accepted in the 40th International Computer Music Conference in Greece, and was featured in the 31st Asian Composers League Festival and Conference in Singapore. *Dance of Maria Makiling* was selected for performance at Staffordshire University in England for the 2015 NoiseFloor Festival. Dennis has also been selected to participate in the 45th Annual Festival of New Music at Ball State University in Indiana, and the 2015 National Student Electronic Music Event (N_SEME) at Bowling Green State University in Ohio this March. His composition *NYC 10001* was a finalist in the 2014 International Conference on Auditory Display in NYC.

Michael Rhoades

Composing from a contemporary Musique Concrète perspective augmented by various score synthesis techniques, Michael Rhoades elicits musical events from generative algorithms and an ever-expanding Csound sample playback instrument. Numerical representations of aural quanta are mixed and blended into formal elements via a variety of catalysts such as tendency masks, mathematical equations, sonifications, cellular automata, score based sampling and other paradigms in an unbending quest for emergent quanta.

Michael is honored to have served as a SEAMUS board member and to have hosted the SEAMUS 2009 National Conference. He has curated numerous other concerts, exhibits and installations. His works have been presented in concert worldwide as well as used for pedagogical purposes. He is a published writer and also gives lectures on the subjects of algorithmic composition, score based sampling, sonification, spatialization and creativity. He recently published his 21st CD/DVD.

Michael is also a prolific oil painter and computer artist.

Kyle Rowan

Kyle Rowan (b. 1985) is an Arizona-born, Florida-raised, and California-based composer of contemporary concert music. His music is expressive, frequently focused on generating different kinds of motion and energy through shifting layers of texture, and has been performed throughout the United States as well as internationally at festivals in Italy, Greece, and South Korea by such ensembles as the Momenta Quartet, Palimpsest Ensemble, Kallisti Ensemble, and Los Angeles Clarinet Choir. He holds degrees from the University of Florida (BM '07) and the University of Illinois (MM '09) and is currently a doctoral candidate at UC-San Diego, where he studies with Katharina Rosenberger. His doctoral research focuses on the incorporation of interactive fiction in music composition. He resides in Lakeside, CA, with his wife, Brooke, and dog, Lily.



Élise Roy

Élise Roy (M.F.A. CalArts/ B.Mus Oberlin) is an active flutist, improviser, and composer who strives to find a unique and modern voice for the flute, which is ultimately the source of her musical expression in all of her various roles. As a performer-composer, Élise is fascinated with expanding the expressive possibilities of the flute — often through the novel convergence of extended techniques and electroacoustics. Her recent electroacoustic works have been selected for performance at Electronic Music Midwest, EABD, inner sOUNscapes, PAS-E, NYCEMF, and SEAMUS 2014. Her fixed media work, bas relief (*Flutescape I*), appeared on the SEAMUS Electroacoustic Miniatures 2013: Negative Space album.

Élise currently resides in Los Angeles where is an assistant director of the wasteLAnd concert series. www.eliseroy.com

Bruno Ruviaro

Bruno Ruviaro, composer and pianist from São Paulo, Brazil, was born in 1976, and has lived in 22 different places: Rua Theodureto Souto, Rua Cajati, Casa do Seu Demétrio, Rua São Borja, Rua James Adam, Alameda dos Uirapurus, Avenida Modesto Fernandes, Avenida Santa Izabel, Rua Nuno Álvares Pereira, Rua Prof. Djalma Bento, Rua Dr. Nestor Esteves Natividade, Rua Major Diogo, North Park Street, Jericho Street, Olmsted Road, Thoburn Court, Comstock Circle, Via Parma, Rue de l'Hôtel de Ville, Greenoaks Drive, Miramar Street, 26th Street.

Paul Schuette

Paul Schuette is a composer, sound artist, and performer living and working in Cincinnati, OH. According to Citybeat Cincinnati, he creates “works of art that address multiple senses simultaneously and thoughtfully, no matter the context.” In the concert hall, his music seeks to enhance live performers potential with live electronics. His influences range from theoretical physics to the visual arts, and his music often incorporates unique hardware and computer software. His sound art, including his collaboration with painter Mary Laube (aka *The Warp Whistle Project*) is regularly exhibited.

As a performer, Schuette deploys his menagerie of handmade electronic instruments in improvised settings and is a member of the ensemble Vaster than Empires with Erica Dicker and Allen Otte.

Douglas Scott

Douglas Scott was born in Fullerton, California in 1958. His interest in electronic music and music technology began in 1974 when he built a series of analog synthesizers from kits and circuit diagrams. He studied music composition at UCLA, Indiana University, and Columbia University. Among his teachers were Paul Reale, Frederick Fox, and Mario Davidovsky. He lives with his wife in the San Francisco Bay area, where he works for Apple as an audio software engineer.

Rob Seaback

Rob Seaback is a composer and guitarist working primarily in the electroacoustic genre. He has composed works that pair acoustic instruments with precomposed electronic sound, purely electronic works for fixed media, and sound installations. His output is characterized by stylistic elements drawn from musique concrète, spectralism, and glitch. He holds a B.S. in Music Technology from Northeastern University, an M.A. in Composition from Mills College, and is currently a Ph.D. Fellow at the University of Florida. His teachers have included Mike Frengel, Ron Bruce Smith, Roscoe Mitchell, and Paul Koonce.

Seaback’s electroacoustic work has been presented both nationally and internationally at festivals such as SEAMUS, NYCEMF, Electronic Music Midwest, the Arts and Technology Symposium at Connecticut College, ICMC, the ISCM World New Music Days, and the EMUfest of the Conservatory of Santa Cecilia, Rome. In 2011, he was awarded First Prize in the ASCAP/SEAMUS Student Commission Competition.

Brian Sears

Brian Sears’s music is based on his attraction to timbre, space, color and shape. His compositions use these forces to tell stories and weave complex tapestries that communicate emotions. Brian is from San José, California and holds a Bachelors degree in



Music Composition from San José State University, where he studied with Dr. Pablo Furman and Dr. Brian Belet. He is currently pursuing his Masters degree at Bowling Green State University where he studies with Dr. Elaine Lillios. His music has been performed at the 2013 CEMlrcircles festival for experimental music hosted by the University of North Texas, as well as by the San José Chamber Orchestra, and the Toledo Symphony Orchestra.

Kyle Shaw

Recently hailed as “inspiring” and “dramatic” (Kurt Knecht, Nebraska Wesleyan), Kyle Shaw’s (b. 1987) eclectic music transcends stylistic boundaries. Raised in McKinney, Texas, the composer studied piano with the late Karen Austen and Richard Shuster. He earned a BM at Brigham Young University, studying composition with Michael Hicks, Steven Ricks, Christian Asplund, and Neil Thornock, and organ and carillon with Don Cook. His compositions have been performed in five of the fifty states, and read by the Illinois Modern Ensemble, Stephen Gosling, Curtis Macomber, Chris Finckel, percussionist Matthew Coley and Duo X. He has had private lessons with William O. Smith, Benjamin Ellin, David Rakowski, David Maslanka, and masterclasses with Chaya Czernowin and David Lang. He was selected as a fellow of the University of Nebraska’s 2014 Chamber Music Institute. In 2013, his wind ensemble piece Sylph won the Vera Hinckley Mayhew music composition contest; his piece *Center Panel* won the Iowa State carillon composition contest; and his piece *Wall Flower* was selected for inclusion on the SEAMUS miniatures recording series (available on iTunes). During summer 2011, he was selected to work as a student-intern with the Barlow Endowment for Music Composition. He is currently pursuing his masters degree at the University of Illinois, where he has studied with Carlos Carrillo and Stephen Taylor. He lives in Urbana, IL with his wife Tess and daughter Audrey.

Kazuaki Shiota

Kazuaki Shiota (born in Osaka, Japan) studied algorithmic composition under Phil Winsor from the University of North Texas and computer music composition under Mara Helmuth from the University of Cincinnati College-Conservatory of

Music (CCM), where he received his Doctor of Musical Arts in composition.

His musical interest is centered in collaborations with dancers and choreographers. He co-directs the Interactive Sonic Dance Research Project (ISDRP) with Karen Wissel to develop a new performing style for dancers and musicians. He is an Adjunct Instructor teaching Jammin’ with Laptops Online and a Japanese Pop Music course at the University of Cincinnati College-Conservatory of Music (CCM).

Josh Simmons

The internationally performed works of multimedia artist Josh Simmons are an immersive experience for audience members and performers. Josh aims to engage all of the senses through use of digital multimedia, believing that it is an unnatural phenomenon to hear sound divorced from spectacle. Through employing aural and visual semiotics, Josh plays on the expectations, and emotions that the audience has assigned to various well known symbols. His multimedia works have been featured at the Joint ICMC - SMC 2014 Conference in Athens, and at ACMC 2014 in Melbourne, his music has been read by members of the Toledo Symphony Orchestra, and he was commissioned to create animations for the entirety of Olivier Messiaen’s two hour, piano *tour de force, Vingt regards sur l’enfant-Jésus*. Hear more at be.net/simsies

Phillip Sink

Phillip Sink (b. 1982) is currently a doctoral fellow at the Jacobs School of Music where he is pursuing a doctoral degree (DM) in music composition with minors in electronic music and music theory. At Indiana University, he serves as an associate instructor of composition where he teaches various courses in composition as well as composition lessons. He studies with Claude Baker and his previous teachers were David Dzubay, Aaron Travers, Ricardo Lorenz, Jere Hutcheson, and Scott Meister.

Phillip’s music has been performed in the U.S. and Europe and at many conferences and festivals including: Kansas Music Educators Association conference, World Saxophone Congress, Scotland, NASA (North American Saxophone Alliance)



national and regional conferences, and the Chamber Music Institute in Lincoln, NE.

Vladmir Smirnov

Vladimir Smirnov is a composer and multi-instrumentalist currently based in Durham, North Carolina. He composes music for acoustic ensembles and electronic media, collaborates with a variety of musicians across styles and genres, and records music under different aliases. His music has been performed and read by prominent musicians and ensembles such as the Baltimore Symphony Orchestra, yMusic, Wet Ink Ensemble, the Kandinsky Trio, Jacqueline Horner-Kwiatek, Daniel Gaisford, and others. He is a Ph.D candidate at Duke University, and holds degrees from the Peabody Conservatory, and from Virginia Tech.

Andrew Smith

Andrew Martin Smith (b. 1984, Sharon, CT) is a composer, clarinetist, and entrepreneur based in Northwest Ohio. Through his music he explores the sonic ramifications of interdisciplinary influence and inspiration. He enjoys highlighting the similarities shared between several seemingly disparate disciplines, artistic endeavors, and stylistic trends. His electroacoustic music has been performed at festivals and conferences throughout the United States and Europe, including the National Student Electronic Music Event, the New York City Electroacoustic Music Festival, Electronic Music Midwest, and the International Computer Music Conference. Smith has received degrees in music from the State University of New York at Fredonia (B.M. 2007) and Bowling Green State University (M.M. 2009; D.M.A. 2014). His primary composition instructors have included Mikel Kuehn, Elaine Lillios, Burton Beerman, Andrea Reinkemeyer, Donald Bohlen, and Karl Boelter. He is currently an Adjunct Instructor at Bowling Green State University and Owens Community College, where he teaches courses in music theory and composition.

Lucas Marshall Smith

Lucas Marshall Smith (b.1989) is a composer who hails from New London, Ohio. He holds degrees from Bowling Green State University (B.M. 2012) and the University of Illinois at Urbana-Champaign

(M.M. 2014). Smith is currently pursuing his Doctorate of Musical Arts at the University of Illinois where he is working as the Operations Assistant in the Experimental Music Studios under the direction of Scott A. Wyatt. Active in both acoustic and electroacoustic composition, Smith has received premieres from numerous new music groups including loadbang and the Illinois Modern Ensemble. His composition teachers have included Burton Beerman, Philipp Blume, Carlos Carrillo, Christopher Dietz, Erin Gee, Mihai Popean, Andrea Reinkemeyer, Marilyn Shrude, Stephen Taylor, and electroacoustic studies with Elaine Lillios and Scott A. Wyatt.

Peter Sommer

Since establishing himself among the Denver area's elite jazz musicians, Peter Sommer has contributed his energetic saxophone playing and creative spirit to a wide variety of musical projects ranging from mainstream bebop to avant garde and beyond at venues across the nation and around the world. Peter has performed with the Dallas Symphony Orchestra, the Colorado Symphony Orchestra and the Colorado Music Festival Orchestra, and has been a featured jazz soloist at North American Saxophone Alliance Regional and Biennial Conferences. He has also performed at IAJE International Conferences in Anaheim and Toronto, Canada, and has performed at World Saxophone Congresses in Valencia, Spain, Bangkok, Thailand and St. Andrews, Scotland. He has also released four albums as a leader, most recently *Narrando Historias* (2015) on Dazzle Recordings. Peter Sommer is Associate Professor of Jazz Studies and Saxophone at Colorado State University in Ft. Collins. At CSU, Mr. Sommer directs Jazz Ensemble I and coordinates the Jazz Studies area.

Lucas Smith

Lucas Marshall Smith (b.1989) is a composer who hails from New London, Ohio. He holds degrees from Bowling Green State University (B.M. 2012) and the University of Illinois at Urbana-Champaign (M.M. 2014). Smith is currently pursuing his Doctorate of Musical Arts at the University of Illinois where he is working as the Operations Assistant in the Experimental Music Studios under the direction of Scott A. Wyatt. Active in both



acoustic and electroacoustic composition, Smith has received premieres from numerous new music groups including loadbang and the Illinois Modern Ensemble. His composition teachers have included Burton Beerman, Philipp Blume, Carlos Carrillo, Christopher Dietz, Erin Gee, Mihai Popean, Andrea Reinkemeyer, Marilyn Shrude, Stephen Taylor, and electroacoustic studies with Elaine Lillios and Scott A. Wyatt.

Stephen Smith

Stephen Smith is a senior music major at Cornell College, and has studied composition with Dr. Zach Zubow and Dr. Aaron Perrine. Before coming to school in the Midwest, Stephen grew up in Rhode Island, where he often performed with a classic and progressive rock band. He is currently exploring the world of electroacoustic and other styles of 20th Century art music.

Eric Stern

Eric Stern, from Cheshire, CT, is a master's student in music technology at NYU Steinhardt. He holds a BA in music & technology from Connecticut College, where he studied under Arthur Kreiger, performed with the college jazz ensembles and was a scholar in the Ammerman Center for Arts and Technology. His primary area of interest is audio & music post-production for film and multimedia, though he also studies composition. He has composed fixed-media electronic music, acoustic music, works for live performers with electronic sounds, and film music.

Jeffrey Stolet

Jeffrey Stolet is a Professor of Music and Director of Music Technology at the University of Oregon. Stolet's work has been presented around the world and is available on the Newport Classic, IMG Media, Cambria, SEAMUS and ICMA labels. Presentations of Stolet's work include electroacoustic and new media festivals such as ICMC, SEAMUS, NIME, Musicacoustica-Beijing, the Kyma International Sound Symposium, SIGGRAPH, and Primavera en La Habana. In addition, his work has been presented in such diverse venues as the Museum of Modern Art, the Pompidou Center, CCRMA, and the International Academy of Media Arts

and Sciences (Japan). Recently Stolet completed the first book about the sound-specification programming language Kyma, entitled *Kyma and the SumOfSines Disco Club* that is available in English and in Chinese as *Kyma Xitong Shiyong Jiqiao* by Southwest Normal University Press.

Jacob Sudol

Jacob David Sudol writes intimate compositions that explore enigmatic phenomena and the inner nature of how we perceive sound. He currently is an Assistant Professor of Music Technology and Composition and the Coordinator of Music Technology area at Florida International University in Miami, Florida. He earned a Ph.D. in composition at the University of California at San Diego where his mentor was composer Chinary Ung.

Dr. Sudol has been commissioned and/or performed by many prestigious ensembles and performers such as the Nouvel Ensemble Moderne, Chai Found New Music Workshop, Little Giant Chinese Orchestra, the McGill Contemporary Music Ensemble in collaboration with the McGill Digital Composition Studio, FIU Laptop and Electronic Arts (FLEA) Ensemble. These works have received numerous domestic and international performances at distinguished venues such as the Music at the Anthology Festival, SEAMUS Conference, Domaine Forget Festival of New Music, Taiwan National Recital Hall, the International Computer Music Conference, and ISCM New Music Miami Festival.

In 2012, he founded a cello/electro-acoustic duo with FIU colleague and cellist Jason Calloway and, since 2010, he has been in a piano/electro-acoustic duo with his wife Chen-Hui Jen. He has also collaborated on interdisciplinary projects with visual artist Jacek Kolasinski and architect Eric Goldemberg. As a recording engineer and producer Sudol has worked on compact discs that have been or will be released by Mode, Bridge, and Albany Records.

Jacob David Sudol takes an interest in religious phenomenology, literature, (psycho)acoustics, visual art, cinema, and world folk music. As a composer he always attempts to bring insights from these other fields into his work.



Michael Thompson

Michael Thompson is an electroacoustic composer. His works have been performed at ICMC, at the International Computer Music Festival, KEAMS 2000, Rein à voir and also in Taiwan, Canada, France, Germany, Italy, United Kingdom, Northern Ireland and the US. In addition to winning a residence prize in the 1999 International Electroacoustic Music Competition (Bourges, France) for his composition *MachineWerks*, Michael's works can be heard on the CDCM label.

John Thompson

John Thompson teaches, composes and conducts research in the area of computer music and music technology. He directs the Music Technology program at Georgia Southern University where he is Associate Professor of Music. He has a continuing interest in interdisciplinary studies, and seeks to highlight and follow new paths in music. John is an advocate for music that explores otherness, contemplation and alternate paths toward beauty.

Kyriakos Tsoukalas

Kyriakos Tsoukalas is a maker who likes to generate and organize sound. His work has been performed and showcased in various festivals, concerts and conferences in Europe and the US. Blending a background in electronics engineering and music composition, his current research interests focus on adaptive evolution of a computer-based music instrument, as a doctoral student at the University of Oklahoma.

Paul Turowski

Paul Turowski is a composer, intermedia artist and performer originally from Baltimore, Maryland. He holds a B.M. in composition from Towson University and an M.M. in Intermedia Music Technology from the University of Oregon. He is currently a PhD candidate in the Composition and Computer Technologies program at the University of Virginia, where he is completing his dissertation on interactive notational systems. This involves research in areas like digital signal processing, graphics programming, and game studies.

Chett Udell

From the ancient cypress swamps of Wewahitchka, Florida, Chet Udell earned a PhD in Music Composition with Electrical Engineering from the University of Florida and now serves as instructor of music technology at the University of Oregon. His music is available on the Summit and SEAMUS record labels. Creative interests encompass electroacoustic and acoustic music composition, designing new wireless gestural control interfaces for musical instruments, mobile performance technologies, and constructing autonomous robotic musical agents (robots).

His dissertation research on novel musical interface design resulted in a registered U.S. patent and a technology startup company, eMotion Technologies.

Dan Van Hassel

Dan VanHassel is a composer and multi-instrumentalist based in the San Francisco Bay Area. Ranging from harsh walls of noise to sensuous harmonies, his music creates a quirky and evocative sound world drawing from his experience in rock, Indonesian gamelan, free improvisation, and the Western classical tradition. Recent commissions include the Shanghai Conservatory Electronic Music Week, Santa Barbara's Now Hear Ensemble, the Dinosaur Annex ensemble in Boston, and Splinter Reeds in San Francisco. His works have been performed at concerts and festivals throughout the world, including the MATA Festival, UC Davis Music and Words Festival, Bang on a Can Summer Festival, Wellesley Composers Conference, June in Buffalo, Music11 Festival, International Computer Music Conference, and the SEAMUS National Conference. Dan is co-founder and artistic director of the Wild Rumpus new music ensemble. He has studied composition at the University of California at Berkeley, New England Conservatory, and Carnegie Mellon University.

Joseph Van Hassel

Joseph Van Hassel is a North Carolina-based percussionist specializing in orchestral and chamber music. Performance highlights include Carnegie Hall, the Cincinnati MusicNow Festival, the Percussive Arts Society International Convention, the International Tuba Euphonium Conference, and



the Hindemith Center in Switzerland. Joseph has individually commissioned and premiered works by many composers and is especially noted for his close working relationships with David Macbride, Stuart Saunders Smith, and Dan VanHassel. He has earned degrees from the Hartt School, the Cincinnati College-Conservatory of Music, and Ohio University and is currently on faculty at the University of North Carolina at Pembroke and Blue Lake Fine Arts Camp.

Adam Vidiksis

Adam Vidiksis is a composer, conductor, percussionist, and technologist based in Philadelphia whose interests span from historically informed performance to the cutting edge of digital audio processing. Equally comfortable with both electronic and acoustic composition, his music has been heard in concert halls and venues around the world. Critics have called his music "mesmerizing", "dramatic", "striking" (Philadelphia Weekly), "notable", "catchy" (WQHS), "interesting", and "special" (Percussive Notes), and have noted that Vidiksis provides "an electronically produced frame giving each sound such a deep-colored radiance you could miss the piece's shape for being caught up in each moment" (David Patrick Stearns of the Philadelphia Inquirer). Vidiksis has become known for exploring new timbral soundscapes in his electronic and acoustic works, often using the computer not only as a means of enhancing and manipulating the sounds he produces, but as a digital performer on equal footing with its human counterparts. His unique approach to composition has been praised for its "outstanding control" (Philadelphia Weekly) and for being "restrained" and "magical" (Local Arts Live). His music has been played by the Black Sea Symphony in Constanta, Romania, Omaha Symphony, Momenta Quartet, and Zephyrus Duo. His commissions include *Network for New Music*, *ICIA*, the *Luna and Renegade Theater Companies*, and the *ElectroAcoustic Piano project*. He has a deep interest in science and technology, an enthusiasm that has profoundly influenced his work as a musician. Vidiksis's music has won numerous awards, including recognition from SCI and ASCAP. His works are available through HoneyRock Publishing and PARMA Recordings. His music often explores sound, science, and the intersection of humankind with the machines we build. Vidiksis's

research in music technology focuses on techniques for realtime audio processing, designing gestural controllers for live digital performance, and machine improvisation. His gestural controller, the Tapbox DSP, was a semifinalist in the Guthman Musical Instrument Competition. Vidiksis holds degrees from Drew University, New York University, and Temple University, culminating in a doctoral degree in music composition. Vidiksis currently serves on the composition faculty of Temple University, where he teaches classes in music theory, orchestration, composition, and music technology. He is currently conductor of the Temple Composers Orchestra, faculty advisor to conTemplum (Boyer College's new-music student organization and student chapter of the SCI.), and director of the Boyer Electroacoustic Ensemble Project (BEEP). [www.vidiksis.com]

Rodolfo Viera

DMA, Northwestern University

Rodolfo Vieira was named one of the 100 Young Creative Talents of the European Union in 2009. He was also a prizewinner at national and international competitions, including the RDP2 Prémio Jovens Músicos, Julio Cardona International Competition, the Philharmonic Society of Arlington Competition, the Meadowmount School of Music Chamber Music Competition, and the "Búzio" Revelation Prize from Portugal.

Mr. Vieira appeared as a soloist with the ERA Symphony Orchestra in Chicago, the Metropolitan Academic Orchestra of Lisbon, and the Espinho Symphony Orchestra. He also appeared in solo and chamber music recitals in North and Central America and Europe. As concertmaster, Rodolfo performed with the Conservatory Project Orchestra at the Kennedy Center in Washington, D.C; the Latin Chamber Orchestra; and the Tutti Chamber Orchestra. Mr. Vieira served as assistant concertmaster of the Civic Orchestra of Chicago under the direction of Pierre Boulez, Bernard Haitink, and Alan Gilbert. Rodolfo appeared at the Ravinia Festival, Lucerne Festival Academy, Oviedo Festival, Gijon Festival, Algarve Festival, and the MusicAtlântico Festival. His performances have been broadcast on WFMT, Chicago's classical radio station, as well as Portuguese national radio.



Rodolfo is a founding member of the Botelho Vieira Piano Quartet, along with his sisters Diana, Ana and Marta. Rodolfo served as a member of the jury at the Sejong Violin Competition in 2012. Mr. Vieira brought IRCAM's technology to Northwestern University to perform Pierre Boulez's *Anthèmes II* for solo violin and Live electronics in 2011. Mr. Vieira works as a software developer at Northwestern University's Advanced Media Production Studio, and is on the artist faculty of the Music Institute of Chicago Academy.

Kirsten Volness

Kirsten Volness is a composer and pianist currently residing in Providence, RI. When not writing electro/acoustic music, she plays piano with NYC-based Hotel Elefant, collaborates with Meridian Project on multimedia performances exploring astrophysics and cosmology, writes and performs operas with homeless advocacy group Tenderloin Opera Company, serves on the board of directors for the Boston New Music Initiative, and is an affiliate artist of Sleeping Weazel. She holds composition degrees from the Universities of Michigan (DMA, MM) and Minnesota (BA summa cum laude), and enjoys teaching both privately and at the University of Rhode Island. www.kirstenvolness.com

Andrew Walters

Andrew Walters was born in Topeka, Kansas but spent most of beginning years in Farmington, Missouri. Dr. Walters has studied composition with Robert Chamberlain, Jan Bach, Robert Fleisher, William Brooks, Zack Browning, Erik Lund, and Paul Zonn and electronic music with James Phelps, Scott Wyatt, and James Beauchamp. His piece IN-EX is featured on the Music from SEAMUS, Volume Nine compact disk and his piece Pushing Buttons is featured on Music from SEAMUS, Volume Sixteen. Walters's music has been performed at various conferences including Spark, Electronic Music Midwest, SEAMUS, ICMC, and the Electronic Juke Joint. He is presently Associate Professor in Music Theory and Technology at Mansfield University in Mansfield, PA.

Chi Wang

Chi Wang is a composer and performer from China. Chi enjoys making music and intermedia art that involve Computer Human Interaction (CHI). Her current research and composition interests include data driven instruments and sound design. Chi's compositions have been performed internationally, including Future Music Oregon Concerts (2009, 2010, 2011, 2014), Music Today Festival (2011), Musicacoustica in Beijing (2011, 2012, 2013, 2014), Kyma International Sound Symposium (2012, 2013, 2014), WOCMAT in Taiwan (2013), CIME (2014). Chi is also an active translator for electronic music related books. She is the primary translator of Electronic Music Interactive (simplified Chinese) and Kyma and the SumOfSines Disco Club, published as Kyma Xitong Shiyong Jiqiao by Southwest China Normal University Press. Chi received her M.Mus. in Intermedia Music Technology from the University of Oregon and previously graduated with a BE in Electronic Engineering focusing on architecture acoustic and psychoacoustics from Ocean University of China. Chi is currently a D.M.A. candidate at the University of Oregon.

Steve Wanna

Steve Wanna is a Lebanese-American composer whose music integrates traditional and non-traditional instruments, often with fixed and/or interactive electronics. Rather than a mandate for reproducing specific results, Wanna's scores seek true collaboration with the performer; ideally, each performance becomes an extension of the compositional process. Language and graphics displace standard notation, asking performers to reframe their approach to their instruments, sound, and music in general.

Wanna's works have been performed by ensembles like Janus Percussion (St. Paul, MN), Juventas (Boston MA), the UNCG Contemporary Chamber Players (Greensboro, NC), at numerous festivals and conferences (ICMC, NYCEMF, SEAMUS, SCI, CMS) and at universities and art galleries nationwide. In 2007, his work *Abeyance*, for two performers and 6-channel interactive electronics won the 1st Annual Ossia International Composition Prize and was premiered by members of the group in 2008. For more information, please visit www.stevewanna.com



Mitch Weakley

I am a Music Education student at Eastern Illinois University. My passion for music composition has always motivated me to create works in many genres of music. EIU's Dr. Brad Decker has been very influential in inspiring me to delve into the world of electro-acoustic music.

Chapman Welch

Chapman Welch received his D.M.A. in music composition and electronic music from the University of North Texas where he worked at the Center for Experimental Music and Intermedia (CEMI). Currently, he is a lecturer at Rice University where he serves as the electroacoustic specialist for the Rice Electroacoustic Music Labs (REMLABS).

He was recently commissioned by the city of Houston along with composer Anthony Brandt and visual artist Jo Fleischhauer to create an installation for the market square clock tower. The six-month installation tuned the sounds of downtown Houston to create a resonant glow that is improvised by the computer each hour. Other recent commissions include works for saxophonist Woody Witt, percussionist Patti Cudd, bassist Paul Cannon, the American Harp Society, and the Liminal Space Duo as well as a multimedia collaboration with visual artist Carmen Montoya for the Ammerman Center for Arts and Technology at Connecticut College.

Active as a performer, Chapman's diverse musical interests have allowed him to appear in settings ranging from performances of Stockhausen's *Kontakte* with percussionist Christopher Deane to improvising with traditional American 'fiddle' tunes at the National Flatpicking Guitar Championship in Winfield, Kansas.

Lee Weisert

Lee Weisert is a composer of instrumental and electronic music and an assistant professor in the Music Department at the University of North Carolina at Chapel Hill, where he teaches courses in composition, electronic music, and musicianship. He has degrees in music composition from the University of Colorado (BM, 2000), CalArts (MM, 2004), and Northwestern University (DM, 2010),

where his primary composition instructors were James Tenney, Michael Pisaro, Jay Alan Yim, and Chris Mercer.

Some of Weisert's current compositional interests include physical modeling, recursive structures, non-traditional performance techniques, and micro-montage. His recent music has incorporated increasingly disparate elements such as orchestral instruments, found sounds, field recordings, digital synthesis, and analog circuitry, in an attempt to find, "through experimentation, tinkering, and unconventional approaches, a ritualistic and deeply expressive world of sound" (Dan Lippel, New Focus Recordings). His instrumental music has been commissioned and performed by nationally recognized performers and ensembles, including Steve Schick and the red fish blue fish percussion ensemble, the Callithumpian Consort, the International Contemporary Ensemble (ICE), the JACK string quartet, Wild Rumpus, Matthew McClure, Clara Yang, and the 4racas Ensemble.

His electronic music has been presented at numerous national concerts and festivals, including SEAMUS (2013), and the International Saxophone Symposium (2013). Along with composer Jonathon Kirk, he is a member of the Portable Acoustic Modification Laboratory (PAML), a collaborative sound installation team. PAML's most recent project, Cryoacoustic Orb, uses underwater microphones to capture the sounds of ice melting from within several large spheres of ice. PAML has been invited to present their sound installation work at festivals and venues across the country. They most recently presented their work at the 2014 TEDx Conference at UNC-Chapel Hill.

Weisert's compositions and sound installations have received grant funding from New Music USA, the Illinois Arts Council, the Center for Interdisciplinary Research in the Arts, and the UNC Performing Arts Special Activities Fund. His music is published by the Brooklyn-based new music label New Focus Recordings. *Wild Arc*, his debut CD of original compositions, was released in 2014, and has been praised by critics as "dazzling" and "mind-melting." *Wild Arc* is available for purchase online from Amazon, iTunes, and the New Focus Recordings label site (<http://www.newfocusrecordings.com>).



Samuel Wells

Samuel Wells is a composer, performer, and arranger based in Bloomington, Indiana. As an advocate for new and exciting music, he actively commissions and performs contemporary works for trumpet. Hailing from Des Moines, Iowa, Sam has performed throughout the United States, as well as in Canada and France. He has performed electroacoustic works for trumpet and presented his own music at the Chosen Vale International Trumpet Seminar, as well as the Electronic Music Midwest, Electroacoustic Barn Dance, N_SEME, and SEAMUS festivals. Sam and his music have also been featured by the Kansas City Electronic Music and Arts Alliance (KcEMA) and Fulcrum Point Discoveries. In February 2014, Sam was the guest artist and composer at the Montana State University Brass Weekend. Sam has collaborated with Max Wellman and the Belin Quartet to create all new arrangements of classic songs from the American songbook. His work (*dys* functions) is published by qPress. Sam has degrees in both performance and composition at the University of Missouri-Kansas City, where he studied composition with James Mobberley, Paul Rudy, Chen Yi and Zhou Long, and trumpet with Keith Benjamin. He is currently studying with Sven-David Sandström, Jeffrey Hass, and John Rommel while pursuing graduate degrees in Trumpet Performance and Computer Music Composition at Indiana University, where he served as the Assistant Director of the IU New Music Ensemble, and is currently the Assistant Director sabbatical replacement for the Center for Electronic and Computer Music.

Jake Whitecar

Jake Whitecar is a composer, producer, and multi-instrumentalist living and working in Missoula, MT. Jake is active in a variety of media, currently working on a commission for concert band and a variety of pieces for small chamber ensembles. He also recently completed his Masters at the University of Montana, produced and performed on the debut album from Missoula band, Mendelssohn, and produces music and other content for Ndigena Creative Media.

Benjamin Whiting

Benjamin D. Whiting received his BM in Music Composition and his MM in Music Theory and

Composition from Florida State University, and is now pursuing his DMA at the University of Illinois at Urbana-Champaign. He is an active composer of both acoustic and electroacoustic music, and has had his works performed in the United States, the Czech Republic, Italy, and Japan. Most recently, his piece for chamber orchestra, *Tempus Imperfectum*, was awarded Third Prize in the 2014 Busan Maru International Music Festival Composition Competition, and his electroacoustic *pieceFL* has been released on ABLAZE Records' album *Electronic Masters*, vol. 3, along with having been honored with performances at the 2014 College Music Society National Conference, SEAMUS 2014, and the New York City Electroacoustic Music Festival. Whiting has studied with such composers as Scott Wyatt, Erik Lund, Erin Gee, and Ladislav Kubik. He currently resides in Champaign, Illinois

Stephen Wierenga

RedWierengaisapianist,keyboardist,respectronicist, improviser, and composer currently based in New York City. His longest creative association is with the Respect Sextet, called "a group which has released one of the most compelling recordings of the year," by the Wall Street Journal, and "one of the best and most ambitious new ensembles in jazz" by Signal To Noise.

He performs and records in a wide array of musical settings, from free improvisation, jazz and new music to rock, pop, and world musics. He has performed and/or recorded with artists including Nell Bryden, the David Crowell Ensemble, Signal, Brad Lubman, Salo, the Fireworks Ensemble, The Claudia Quintet, and others.

As a creative musician and researcher, Wierenga is primarily concerned with electronic and electro-acoustic sound. He works to interface acoustic instruments with electronics and builds physical devices for the control of computerized sound, producing new instruments and meta-instruments. His software creations have been used in performances by musicians including Keith Rowe and Jim Black.

Wierenga received his Bachelor of Music from the Eastman School of Music, where his teachers included Harold Danko and Ralph Alessi. In 2004



Wierenga moved to the Netherlands, where he studied electronic and computer music at the Institute of Sonology at the Royal Conservatory in The Hague. Since 2011 he has been enrolled in the doctoral composition program at the City University of New York Graduate Center, where he is an Enhanced Chancellor's Fellow.

Evan Williams

The music of Evan Williams draws from a wide range of influences, both musical and cultural. His work reflects inspirations from the Baroque, Romanticism, Modernism, Post-Minimalism, contemporary popular music, and everything in between. Originally from the Chicago suburbs, Williams is currently pursuing a Doctorate of Musical Arts in Composition at the College-Conservatory of Music at the University of Cincinnati, where he has studied with Michael Fiday and Mara Helmuth. He holds a Master's degree from Bowling Green State University (Bowling Green, OH) and a Bachelor's from the Conservatory of Music at Lawrence University (Appleton, WI). His other primary teachers have been Asha Srinivasan, Joanne Metcalf, Christopher Dietz, Mikel Kuehn, and Marilyn Shrude. He has also received instruction in festivals, masterclasses, and lessons from composers Libby Larson, David Maslanka, Evan Chambers, Stacy Garrop, Dan Visconti, Bill McGlaughlin, Adam Gorb, and others.

Williams' music has been performed across the country and internationally in Canada, Italy, and Switzerland. His work has been performed by members of Fifth House Ensemble, the Verb Ballets, the Lawrence University Symphony Orchestra, and at festivals such as Fresh Inc, Studio 300, the Electroacoustic Barn Dance, and the Midwest Composers Symposium. He has also received readings by the JACK Quartet, Oasis Saxophone Quartet, and Toledo Symphony Orchestra, among others. His piece *the waters wrecked the sky* for unaccompanied clarinet can be found on album *In Memoriam Dinu Ghezzo* by The Namaste Ensemble's "No Borders Quartet" performed by Italian clarinetist Arianna Tieghi, and his work GRIME for violin, viola, cello, and double bass (premiered at the Grand Finale of Make Music Chicago 2013) was featured on I CARE IF YOU LISTEN's Spring 2014 Mixtape.

Jonathan Wilson

Jonathan Wilson is a second-year doctoral student studying music composition at the University of Iowa. He is the winner of the 2014 Iowa Music Teachers Association Composition Competition and a runner-up for the 2014 Donald Sinta Saxophone Quartet National Composition Competition. Receiving his Master of Music and Bachelor of Music degrees in music composition from Western Illinois University, Jonathan has studied composition with David Gompper, Lawrence Fritts, James Romig, James Caldwell, Paul Paccione, and John Cooper. In addition to composition, Jonathan has studied conducting under Richard Hughey and Mike Fansler. His compositional process is concept-oriented, and each concept, in turn, generates the structural ideas that unify his works. His future plans are to complete his doctoral program in music composition and to teach at a university. Jonathan is a member of the Society of Composers, Inc., SEAMUS, the Iowa Composers Forum, and the American Composers Forum.

Karen Wissel

Karen Wissel (Jackson, MS native) is a choreographer, teacher, researcher, dancer and cellist. Currently teaching modern at the University of Cincinnati, College-Conservatory of Music. She holds a BFA in dance from the Ohio State University where she studied under Bebe Miller and Vickie Blaine.

Since 2008 her choreo-musical background has been applied to computer music. Some of the works include *Dance+Music+Sensors2 (ccm)2 Collaboration* (Sonic Explorations 2008), *On Your Mark...* (CCM Ballet and Mara Helmuth collaboration, 2009), and *American Fairy* (Media Project in Tokyo, 2010), to name a few.

As co-founder/co-artistic director of Interactive Sonic Dance she has been experiencing endless possibilities for expanding dialogue/play between dancers and musicians.



Ryan Woodward

Ryan Woodward is an active composer and performer, having taken lessons in composition, clarinet, viola and piano as an undergraduate student. He studied composition under Dr. Patrick Long at Susquehanna University, from where he graduated in 2014. His music has most recently been performed at the International Clarinet Congress festival. He is currently studying Computer Music Composition with Dr. McGregor Boyle at Peabody Conservatory.

Jaesong You

Jaeseong You is a composer/researcher at Music & Audio Research Lab, Steinhardt, New York University, where You is currently serving as Editorial Manager at Journal SEAMUS and working under Dr. Tae Hong Park on Electro Acoustic Music Mine, Citygram, Urban Soundscape Event Classification, and Sound Beacon.

Mark Zaki

Building on his many diverse interests, composer and violinist Mark Zaki's work ranges from historically-informed and traditional chamber music to electroacoustic music, mixed-media composition, and music for film. In 2012-13, Mark was a visiting professor at the University of Sheffield as the recipient of a Fulbright Scholar Award to the United Kingdom. Currently on the faculty at Rutgers University-Camden, he is the director of the Music Program and the Rutgers Electro-Acoustic Lab (REAL). He also has recently served as the president of the Society for Electro-Acoustic Music in the United States (SEAMUS).

Zach Zubow

Zach Zubow's compositions have been featured on numerous new music conferences and festivals throughout the United States, Europe, and Asia including SEAMUS, ICMC/SMC, and Electronic Music Midwest. He has won awards from the College Music Society, SCI/ASCAP, and was the first place winner of the Five College New Music Festival Student Composition Competition. Zubow's string quartet, Sundown, was included in the most recent publication of the SCI Journal of Music Scores Volume No. 49. Zubow completed his PhD in music composition from The University of Iowa in 2012 studying with Lawrence Fritts and David Gompper and currently teaches music theory and composition at Coe College in Cedar Rapids, IA. For more information please visit www.zachzubow.com.



Acknowledgments

We are grateful to the following people and organizations for their support and collaboration, while planning and hosting the SEAMUS 2015 National Conference.

Patty Raun
Ben Knapp

Doug Bowman
Karen DePauw
John Lesko
Roop Mahajan
Brian Mathews
Mark McNamee
Scott Midkiff
Dale Pike
Barbara Ryder
Elizabeth Spiller

Pat Aldridge
Courtney Fowler
Rob Gainer
Jon Catherwood-Ginn
Michele Klawitter
Matthew Komelski
George Ligon
Meghan Macera
Dan Morehead
Nicole Paglialonga
Tamar Petersen
Chris Piatt
Susanna Rinehart
Jackie Sanders
Kelly Sulick
Tanner Upthegrove
Ruth Waalkes
Samuel Welborn
Holly Williams
Doug Witney

Tracy Cowden
Betsy Crone
Jay Crone
Michael Dunston
Philip Paglialonga
Annie Stevens
Alan Weinstein
Ariana Wyatt

Sweetwater Inc.
Rock the Blocks
Festival

Tuned in.



Music Composition and Production Degrees

- Doctor of Arts in Music (Theory and Composition Emphasis)
- Master of Music in Composition
- Bachelor of Science in Music Media Production
- Bachelor of Music in Composition: Instrumental/Vocal or Sonic Arts Technology

Graduate assistantship opportunities available

Work in our state-of-the-art music media production studios: computer music, composition, recording technology

bsu.edu/music

BALL STATE UNIVERSITY



SCHOOL OF MUSIC

Electroacoustics @BGSU

explore • create • experiment • engage



High-End Studios
10.2 flexible multichannel Ambisonics

Hands-On Learning
Synthesis and Digital Audio
Interactive Performance Systems
Experimental Audio/Animation
Recording Technology

KEAR Residency
Compose, research, develop

Comprehensive Degrees
MM in Composition
DMA in Contemporary Music
Assistantships Available

College of Musical Arts • Bowling Green State University • eastudios.bgsu.edu

AT THE FOREFRONT OF EXPERIMENTAL MUSIC

Embrace new sounds and musical forms while pursuing your individual approach to music at Mills College.

MAKE A STATEMENT.

Located in the heart of the culturally diverse San Francisco Bay Area, Mills College is a leader in electronic and computer music, the recording arts, and experimental media. Home to the internationally renowned Center for Contemporary Music, Mills offers you a creative environment to pursue your graduate education in music.

GRADUATE DEGREES

- MFA in Electronic Music and Recording Media
- MFA in Music Performance and Literature
- MA in Composition

You can work closely with distinguished professors who are also extraordinarily gifted artists, such as Fred Frith, Pauline Oliveros, Roscoe Mitchell, Chris Brown, Maggi Payne, John Bischoff, James Fei, and Les Stuck as you find your own voice. Mills music graduates go on to succeed as innovators across all musical genres.

MILLS

www.mills.edu/music

Sweetwater®

Music Instruments & Pro Audio

SPLICE

SUMMER institute for PERFORMANCE, LISTENING, INTERPRETATION, and CREATION of ELECTROACOUSTIC music

July 5-11, 2015

Western Michigan University School of Music in Kalamazoo, Michigan

SPLICE is a week-long intensive program for performers and composers to experience, explore, interpret, and create music for instruments and electronics. Students participate in workshops, master classes, private lessons, improvisation sessions, performances, and concerts, in addition to attending faculty concerts each night.

SPLICE features workshops ranging from basic introductions of equipment and software to high level courses focusing on advances in interactive systems and effects processing, **SPLICE is designed for all performers and composers, regardless of previous background.** The program culminates with a day of recitals featuring students' work.

2015 Guest Composer: Elainie Lillios

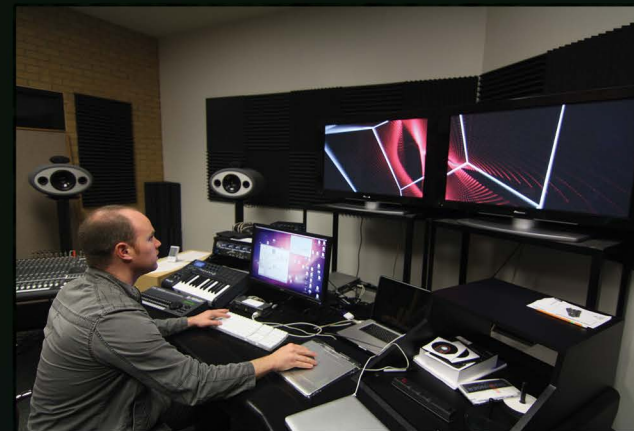
Composition Faculty

Christopher Biggs
Per Bloland
Richard Johnson

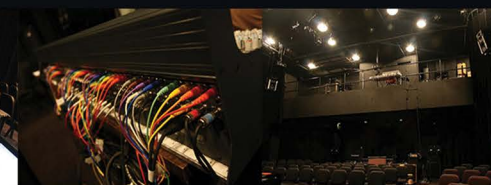
Performance Faculty

Keith Kirchoff, keyboard
Adam Vidiksis, percussion
Samuel Wells, brass
David Wetzel, winds

WWW.SPLICE.INSTITUTE SPLICE.INSTITUTE@GMAIL.COM



University of North Texas Division of Composition Studies Center for Experimental Music and Intermedia



Cutting-Edge Music, Art, and Research
World-Class Studios
Dedicated Intermedia Performance Theater

Graduate teaching fellowships
and assistantships available

For more information, visit:

composition.music.unt.edu

cemi.music.unt.edu

iarta.unt.edu

Graduate Composition Degree Tracks:

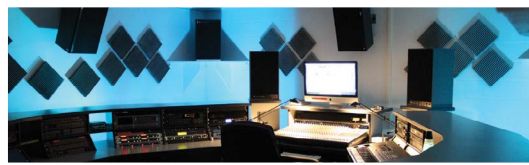
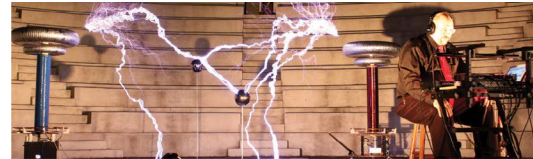
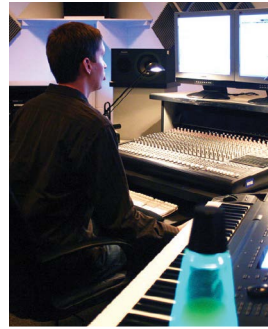
- MA:
 - general composition
 - computer music media
 - interdisciplinary studies
- PhD:
 - general composition
 - computer music media
- Related field studies in contemporary music performance

Resident Faculty:

Kirsten Broberg
Joseph Klein
Panayiotis Kokoras
Andrew May
Elizabeth McNutt
Jon Christopher Nelson
David Stout

A green light to greatness.

DIVISION OF COMPOSITION STUDIES
College of Music **UNT**



DEGREES OFFERED:

- Bachelor of Arts in Composition
- Bachelor of Arts in Music Technology **NEW!**
- Bachelor of Music Composition
- Master of Music in Composition
- Doctor of Musical Arts in Composition



COMPOSITION & ELECTROACOUSTIC MUSIC

AT THE UNIVERSITY OF ILLINOIS

FACULTY:

- Zack Browning
- Carlos Carrillo
- Erin Gee
- Erik Lund
- Andrea Solya
- Heinrich Taube
- Stephen Andrew Taylor
- Reynold Tharp
- Sever Tipei
- Scott A. Wyatt

THE EXPERIMENTAL MUSIC STUDIOS:

Electroacoustic music activities at the School of Music have earned the University of Illinois an international reputation as a leader in the field of contemporary art music. Known for significant creative and technical developments in electroacoustic and computer music composition, the University of Illinois Experimental Music Studios (EMS), founded in 1958 by Lejaren Hiller, were the first of their kind in the western hemisphere, and continues as an active and productive center for electroacoustic and computer music composition, education, and research.

Today EMS has nine custom designed studios for serious sound generation, processing and recording including exceptional 5.1 and 8.1 channel realization facilities. The EMS Computer Music Project, founded in 1984, offers a Linux-based time-sharing system for the teaching of computer music and acoustics, research in computer sound analysis/synthesis, computer-assisted composition, sound visualization, and sonification. Software developed in CMP such as DISSCO is then used in the classroom and studio teaching. We strive to enhance our students' knowledge, creative potential, and degree of innovation in composition, contemporary sound synthesis, and technology-assisted performance through a balance of teaching, research, and creative performance.

To read more, please visit:
www.ems.music.illinois.edu



THE COMPOSITION-THEORY DIVISION:

The University of Illinois Composition-Theory Division is recognized internationally for its innovations, diversity, instruction, and excellent performance resources. As one of the country's largest composition departments, it offers unique research opportunities and maintains the highest standards for the composition and performance of new music.

We seek to challenge the status quo, to question the premises on which tradition unthinkingly rests, and to require of ourselves, our colleagues, and our students that alternatives be proposed and considered. We pursue this purpose in our teaching, in our composition, performance, and research.

To read more, please visit:
www.camil.music.illinois.edu/CompTheory

SCHOOL OF MUSIC | COLLEGE OF FINE + APPLIED ARTS

Plug-and-Play Wearable Wireless Sensing



Wirelessly translates performance gesture to:

- OSC
- MIDI
- DMX
- Key/Mouse Emulation
- Standalone Apps
- MaxMSP tools

Enter Here



www.unleashemotion.com





music.uoregon.edu
stolet@uoregon.edu

Outstanding Music Technology faculty members teach:

- Computer Music Composition
- Performance with Data-driven Instruments
- Musical Performance Networks
- Interactive Media Performance
- Music with Sensors
- Oregon Electronic Device Orchestra
- History of Electroacoustic Music
- Digital Audio and Sound Design
- Digital Audio Workstations
- Audio Recording Techniques

