

# MARK ROBINSON

Department of Communication  
Swain 211A, CB 6235  
UNC-CH Chapel Hill, NC 27599  
[mrobin@email.unc.edu](mailto:mrobin@email.unc.edu)

## Education:

2001, **M.A.** Communication/Media Studies, University of North Carolina at Chapel Hill.  
1991, **B.F.A.** phi beta kappa. Studio Art - Multimedia Sculpture, University of North Carolina at Chapel Hill.

1983-1986, Aerospace Engineering, GPA 3.025 on a 4.0 scale; 97 credit hours, North Carolina State University, Raleigh. Coursework includes extensive Math and Chemistry.

## Professional Experience:

### ***University of North Carolina at Chapel Hill***

2004-Present, Director, Media Laboratory, Dept. Communication, UNC-CH

*Direct and Support Multimedia Labs and the Media Production Concentration*

2004-Present, Instructor, Audio Production and audio engineering

2004 - 2017, Department Webmaster - Develop/Maintain departmental web presence

2002-04, Visiting Lecturer, University of North Carolina, Chapel Hill, North Carolina

### ***Solidzebra, Inc.(S Corp)***

1990-2006, *President*, Digital Multimedia S-Corporation. Efland, North Carolina.

Internet Technology Multimedia Consultant.

Specializing in design/build interactive humanistic computing. Deliver large scale, large budget projects on time and on budget.

*- Client development, Design/Build Human Interactives, Sys. Admin , book-keeper (5 employee).*

## Honors:

2013 - 15, Recognition by UNC-CH Undergraduate Retention, Office of Undergraduate Education.

2011, UNC-CH Information Technology Committee.

2010, UNC-CH Information Technology Award.

2009, Eva-Marie Saint - Jeffrey Hayden Award for Faculty Mentoring.

2009, Nominated for the UNC-CH Information Technology Award.

2008, UNC-CH Information Technology Committee.

2007, UNC-CH Information Technology Award.

2006, UNC-CH Employee Forum Recognition Program recipient.

2004, UNC-CH StarHeels Award.

2001, Outstanding Achievement in Live Performance Award. UNC-CH.

2000, Earl Wynn Award for Excellence in Media Production. UNC-CH.

1994, Indy Award , Independent News weekly, member Wifflefist art group.

1991, Phi Beta Kappa.  
1991, Bachelors with highest honors, UNC-CH.  
1991, Kachergis Grant: Undergraduate Artist Grant for excellence.  
1990, The Undergraduate Research Awards Program Honors Grant.

### **Products of Scholarship:**

#### **Book Chapters**

2020 "Grading the Quality of ISIS Videos: A Metric for Assessing the Technical Sophistication of Digital Video Propaganda," (with Dr Cori Dauber), *Islamic State's Online Activity and Responses. Chapter 4, CRC Press/ Routledge.*

<https://www.crcpress.com/Islamic-States-Online-Activity-and-Responses/Conway-Macdonald/p/book/9780367858650>

2019, "How Homegrown Violent Extremism Will Likely Continue to Evolve as a Significant Threat,"(with Dr. Cori Dauber) In *Online Terrorist Propaganda, Recruitment, and Radicalization: Ch. 5*, ed. John R. Vacca, Boca Raton, FL: CRC Press.

#### **Selected Peer Reviewed and Competitively Selected Publications**

2019, "Call of Duty Jihad: How the Video Game Motif Has Infiltrated Jihadist Video Propaganda and Why It Matters," (with Dr. Cori Dauber, Jovan Baslios, and Austin Blair) *Perspectives on Terrorism*, (June issue)

<https://www.universiteitleiden.nl/binaries/content/assets/customsites/perspectives-on-terrorism/2019/issue-3/02--dauber-et-al..pdf>

2019. "Grading the Quality of ISIS Videos: A Metric For Assessing the Technical Sophistication of Digital Video Propaganda," (1<sup>st</sup> with Dr. Cori Dauber) *Studies in Conflict and Terrorism*, 42:1-2, 70-87, DOI: 10.1080/1057610X.2018.1513693:

<https://www.tandfonline.com/doi/full/10.1080/1057610X.2018.1513693>

#### **Publications and Briefings**

2019, "Terrorism and Technology: The Front End," (1<sup>st</sup> with Dr. Cori E. Dauber) *Smallwarsjournal.com.* (<https://smallwarsjournal.com/jrnl/art/terrorism-and-technology-front-end>)

2019, "Terrorism and Technology (with Dr Cori Dauber)," TASM Conference (Terrorism and Social Media) VOXPOL EU Consortium, Swansea, Wales, June.

2019, "Metric for Assessing Technical Sophistication of Digital Video Propaganda," presented in-person by Dr Cori Dauber, Home Office, RICU, London, U.K.

2019, "Call of Duty Jihad: How the Video Game Motif Migrated Downstream from Islamic State Propaganda Videos," (with Cori E. Dauber, Jovan J. Baslios, and Austin G. Blair).

Perspectives on Terrorism, vol. 13, issue 3, 2019

(<https://www.universiteitleiden.nl/binaries/content/assets/customsites/perspectives-on-terrorism/2019/issue-3/02--dauber-et-al..pdf>)

Senior Command USASOC

GLOBAL TERRORISM INDEX 2019 MEASURING THE IMPACT OF TERRORISM.” n.d.

<http://visionofhumanity.org/app/uploads/2019/11/GTI-2019web.pdf>. p.83.

2018, “The Radicalized Aesthetic: How the IS Visual Sensibility Came To Dominate,” (with Dr. Cori Dauber). VOX-POL, Amsterdam, Holland. (briefing)

2018, “Qualitative Data Structuring of Extremist Video: A Metric For the Analysis of the Quality of Visual Propaganda,” (1<sup>st</sup> with Dr. Cori Dauber), *Studies in Conflict and Terrorism*, Taylor & Francis.

<https://www.tandfonline.com/doi/abs/10.1080/1057610X.2018.1513693>.

2017, “Grading the Quality of ISIS Videos: A Metric for Assessing the Technical Sophistication of Digital Video Propaganda” (presentation with Dr Cori Dauber, TASM Conference (Terrorism and Social Media) VOXPOL EU Consortium, Swansea, Wales, June 21, 2017

2016, “Visual Imagery in ISIS Video Propaganda,” “After ISIL: Stability and Spillover,” sponsored by U.S. Army Special Operations Command, TISS, and The Laboratory for Unconventional Conflict and Simulation, Durham, N.C, December 2.

2016, “ISIS Use of Visual Imagery: Implications for Counter-Narratives,” (with Dr. Cori Dauber), SMA in Support of SOCOM, delivered via web-based platform  
“Comments on Video Propaganda,” Memo for senior leadership of Central Command, solicited, regarding propaganda usage in areas under ISIL control in *SMA-Reach back*, (December, 2016,) [http://nsiteam.com/social/wp-content/uploads/2016/12/QL-5\\_-response--how-audiences-reveive-info\\_10-4-2016FinalDraftV2.pdf](http://nsiteam.com/social/wp-content/uploads/2016/12/QL-5_-response--how-audiences-reveive-info_10-4-2016FinalDraftV2.pdf)

2016, *Mastering the Message: Engaging our Youth, Countering Daesh Propaganda*, The Carter Center, Zurich, Switzerland. Media and technology expert.  
*Workshop 01*,  
[https://www.cartercenter.org/resources/pdfs/peace/conflict\\_resolution/countering-isis/countering-daesh-workshop-1-report-092916.pdf](https://www.cartercenter.org/resources/pdfs/peace/conflict_resolution/countering-isis/countering-daesh-workshop-1-report-092916.pdf)  
*Workshop 02*,  
[https://www.cartercenter.org/resources/pdfs/peace/conflict\\_resolution/countering-isis/countering-daesh-workshop-2-report.pdf](https://www.cartercenter.org/resources/pdfs/peace/conflict_resolution/countering-isis/countering-daesh-workshop-2-report.pdf)

2016, *Mastering the Message: Engaging our Youth, Countering Daesh Propaganda*,

2015, *Countering ISIS: One Year Later*, Invitational conference at National Defense University, Washington, DC.

2015, *Digital public affairs podcast: ISIS and the Hollywood visual style*: Mark Blevis, <http://markblevis.com/digital-public-affairs-podcast-isis-and-the-hollywood-visual-style/>,

2015, "ISIS Use of Visual Imagery: First Cut on a Quantitative Matrix," (With Dr. Cori Dauber), Joint Special Operations Masters/CISA Symposium, Ft. Bragg, NC, May 12.

2015, *ISIS Use of Visual Imagery: Implications for Counter-Narrative SMA Support to SOCCENT* Teleconference, co-briefing by Dr. Cori Dauber and Mark Robinson.

2015, *ISIS and the Hollywood Visual Style*, co-authored Dr. Cori Dauber and Mark Robinson Guest Post, *Jihadology.net*, July 6. <https://jihadology.net/2015/07/06/guest-post-isis-and-the-hollywood-visual-style/> (later reprinted in *Foreign Policy*)

Cited:

Atlantic: *War Goes Viral: How Social Media Is Being Weaponized Across the World*. November, 2016.

The Economist: *The Islamic State: The Propaganda War*, Aug. 15, 2015. <http://www.economist.com/news/middle-east-and-africa/21660989-terrorists-vicious-message-surprisingly-hard-rebut-propaganda-war>,

*Foreign Policy: Iran Nuclear Negotiations Continue over Debate on Sanctions Relief*, July 08, 2015. <http://foreignpolicy.com/2015/07/08/iran-nuclear-negotiations-continue-over-debate-on-sanctions-relief/>

Anne Stenersen, "A History of Jihadi Cinematography," in Thomas Hegghammer, ed., *Jihadi Culture: The Art and Social Practices of Militant Islamists* (Cambridge, UK: Cambridge University Press, 2017): 108-127

Lauren Williams, *Islamic State Propaganda and the Mainstream Media* (Lowy Institute for International Policy Analyses, 29 February 2016) [https://www.lowyinstitute.org/sites/default/files/islamic-state-propaganda-western-media\\_0\\_0.pdf](https://www.lowyinstitute.org/sites/default/files/islamic-state-propaganda-western-media_0_0.pdf)

2015, *ISIS Use of Visual Imagery: Implications for Counter-Narrative*, co-present (with Dr Cori Dauber), SMA Support to SOCCENT telecon July.

### **Exhibits and Screenings**

2008 – present <http://www.youtube.com/lemmonstheshinyclown>, YouTube Channel – *LemmontheShinyClown*

2017, *Flight Control*. Audio sculpture. Invitational show: "Re-volt-ing: an art show in protest." Distillery Gallery. Boston, Massachusetts.

<https://bostonhassle.com/event/re%C2%B7volt%C2%B7ing-an-art-show-in-protest/>

2015, *Cities Under Water*, LASOHALO. Audio Album, authored, engineered and mastered in collaboration with Ted Singdahlsen. Released on iTunes, Spotify, Rdio, Amazon, Google Play, YouTube. <https://www.amazon.com/Cities-Under-Water-LASOHALO/dp/B015KPX6SM>

2014, *LasoHaloLand*, LASOHALO. Audio Album, authored, engineered and mastered in collaboration with Ted Singdahlsen. Released on iTunes, Spotify, Rdio, Amazon, Google Play. [https://www.amazon.com/Lasohaloland-LASOHALO/dp/B01B73OUD6/ref=sr\\_1\\_1?keywords=lasohaloland&qid=1578265792&s=d\\_music&sr=1-1](https://www.amazon.com/Lasohaloland-LASOHALO/dp/B01B73OUD6/ref=sr_1_1?keywords=lasohaloland&qid=1578265792&s=d_music&sr=1-1)

2010, *Psychesthenia* collaborated on media installation/game in RENSI Immersion Room. Prof. Joyce Rudinsky (PI) Project Leader: Joyce Rudinsky, UNC, Assistant Professor of Communication Studies and RENCI Chief Domain Scientist for Digital Arts and Humanities. Project Team: Victoria Szabo, Duke, program director of information science and information studies; Mark Robinson, UNC, Communication Studies Lecturer and Media Lab Director; Jason Copolsky, RENCI, Senior Visualization Engineer.

Panel Discussion Duke University's ISIS Tech and New Media April 2010 with Joyce Rudinsky (PI), Victoria Szabo, Jason Copolsky, Eric Knisley, Mark Robinson. Article - UNC *Endeavors*

[http://endeavors.unc.edu/spr2010/virtual\\_phobias\\_virtual\\_obsessions.php](http://endeavors.unc.edu/spr2010/virtual_phobias_virtual_obsessions.php)

2009, *TERNION*, Video and Robotic Installation show, Arts West Gallery, Elon University, Elon, NC.

2009. *Centipede*, w/ Charred and Lacquered revival.

[https://www.youtube.com/watch?v=Dw\\_qizcxSBE](https://www.youtube.com/watch?v=Dw_qizcxSBE)

2009, *Tear: Foucault: Tear* DV-NTSC video, UNC-CH.

<https://www.youtube.com/watch?v=gos44UMa6F4>

2009, LASOHALO aired on <http://www.some-assembly-required.net/>.

<http://www.blog.some-assembly-required.net/2009/06/laso-halo.html>.

<https://itunes.apple.com/us/podcast/some-assembly-required/id102949138>

2007, est. *iTunesU Carolina*. Contributor/developer/administrator.

2008, *Healing Hearts*, Studio producer and audio engineer, video documenting a UNC-CH hospital medical relief mission to Uganda. Utilized by the UNC-CH Development office for gift generation. Showcased at Memorial Hall, UNC-CH.  
<https://www.youtube.com/watch?v=Isg7lYuhF6o>

2008, *Spectacular Justice*, collaborated on media installation with Prof. Joyce Rudinsky (PI) operating under a Carolina Performing Arts grant. Social Computing Room, Renaissance Computing Center, UNC-CH.

2006, *Elysiana*, (w/ Charred and Lacquered Revival), DV video. 48 Hour Film Project, Greensboro, NC. <https://www.youtube.com/watch?v=Lu3qBQy-V4M>

2005, *Confusing Fall Warbler*, video, oxidized (ash) drawing, warbler carcass and latex. The Charred and Lacquered Revival show, Mebane, NC.  
<https://www.youtube.com/watch?v=14A87MGlYk&t=32s>

1994 – 2005 <http://www.shinyclown.com> (retired) Video channel collaboration with Ted Singdahlsen. Extensive library of QuickTime videos and associated mythologic construction. Examples a long history w/ compression and internet broadcast and streaming software, techniques and engineering. A proto-internet (prior to YouTube for example) experimental channel where content, compression and delivery were tested and developed.

2003, *Loss of Leopard Pudding (02)* Live multimedia and robotic performance. Theater of Performing Objects collaboration. Ringside, Durham, NC. (assoc. DADA.org).

2001, *Black Lemmons*: MA Thesis work: Extensive HTML and Flash project including a textual theoretical analysis. CD-ROM.

2001, *Lemmons the Shiny Clown - Urgency Broadcast*, (w/ T Singdahlsen) Internet Live digital video stream (ibiblio.org server at UNCCH). Wrote, directed, produced, edited, compressed and acted an original 50 minute live digital video streaming performance. Production included all technical aspects of video streaming and web site construction.  
[https://www.youtube.com/user/lemmonstheshinyclown/videos?view\\_as=subscriber](https://www.youtube.com/user/lemmonstheshinyclown/videos?view_as=subscriber)

1997, *Cooking with Lemmons*, MBONE (Internet), iEAR studios at Rennselear Polytechnic. Wrote, directed, acted a 1.5 hour live digital video stream performance. 1<sup>st</sup> entertainment/art video streamed on the Internet.  
[https://www.youtube.com/user/lemmonstheshinyclown/videos?view\\_as=subscriber](https://www.youtube.com/user/lemmonstheshinyclown/videos?view_as=subscriber)

1995, Four songs on Wifflefist CD compilation, Scattered, Smothered, and Covered. National release. <https://www.discogs.com/search/?q=Laso+Halo&type=all> &

[http://freemusicarchive.org/music/Laso\\_Halo/Laso\\_Halo/](http://freemusicarchive.org/music/Laso_Halo/Laso_Halo/)

1994, *Lemmons the Shiny Clown*, Live performance of 2<sup>nd</sup> LASOHALO album, included 3 actors performing 45 minute script , The Brewery, Raleigh, N.C. retired link:  
<https://myspace.com/craigzearfoss/video/laso-halo-lemons-the-shiny-clown/38221947>

1993, *Life on Earth is Like the Bloom on a Plum*, (with S. Walker and T. Singdahlsen) Durham Art Guild. Durham, N.C.

1993, *One Of Twenty-Four Hours: A North Carolina Radio Tribute To Throbbing Gristle* (C60) *Water Babies*, LASOHALO. Wifflefist, Nontology, Discogs.com. Spotlight musicians on 24 Hours of Throbbing Gristle, WQFS, Greensboro, N.C.  
[https://archive.org/details/24HoursofThrobbingGristle\\_WQFS](https://archive.org/details/24HoursofThrobbingGristle_WQFS)

1992, Designed and Built artist's residence (in collaboration with Betsy Towns).

1992, *LASOHALO*, 10 song self-titled vinyl LP. All songs were original: Written, engineered, Produced and distributed by artist (collaboration).  
[http://freemusicarchive.org/music/Laso\\_Halo/Laso\\_Halo/](http://freemusicarchive.org/music/Laso_Halo/Laso_Halo/)

1992, *Orpheus*, Installation on Private Property, Chapel Hill, N.C.

1991, *Labors of Hercules*, Performance/ Installation, Efland, N.C.

1991, *From Pit to Pick Axe*, Installation at exhibition space-- U.N.C.

#### **Invited Presentations**

2019, "Metric for Assessing Technical Sophistication of Digital Online Propaganda," Private Briefing for Representatives of the British Home Office, June 24, London, UK

2018, "Metric for Assessing Technical Sophistication of Digital Video Propaganda," Briefing for Psychological Operations Community, (with Dr. Cori Dauber and UNC students), July 19, 4<sup>th</sup> PSYOP Group US Army Special Operations Command, Ft. Bragg, NC (plus global live stream) – same title, different briefing

2018, "Metric for Assessing Technical Sophistication of Digital Online Propaganda," Private Briefing for Representatives of the National Counterterrorism Center (NCTC) April 18, Chapel Hill, NC  
– same title, different briefing

2018, "ISIS Use of Visual Imagery: Implications for Counter-Narratives," (with Dr. Cori Dauber), SMA in Support of SOCOM, delivered via web-based platform  
U.S. Department of State's International Visitor Leadership Program (IVLP), UNC-CH.

### **Invited Publications**

2016, "Comments on Video Propaganda," Memo for senior leadership of Central Command, (including General Votel), with Dr. Cori Dauber, regarding propaganda usage in areas under ISIL control in *SMA-Reach back*, <http://nsiteam.com/social/wp-content/uploads/2016/12/QL-5-response-how-audiences-receive-info-10-4-2016FinalDraftV2.pdf>,

### **Selected Conference Papers**

2019, "Terrorism and Technology: The Front End" (with Dr. Cori Dauber) TASM Conference on Terrorism and Social Media. Swansea, Wales.

2018, "The Radicalization Aesthetic: How the IS Visual Sensibility Came to Dominate," (with Dr. Cori Dauber) Vox-Pol E.U. Conference on Extremism, University of Amsterdam, Amsterdam, Netherlands.

2017, "Qualitative Analysis: A Metric for Visual Propaganda," (with Dr. Cori Dauber) TASM (Terrorism and Social Media) Conference, Vox-Pol Consortium, Swansea, Wales.

2015, "ISIS Use of Visual Imagery: First Cut on a Quantitative Matrix," (With Dr. Cori Dauber), Joint Special Operations Masters/CISA Symposium, Ft. Bragg, NC, May 12.

### **Teaching:**

#### **Undergraduate**

Courses in Media Production (past 5 years):

Advanced Audio Production (10 course offerings) – 14 - 16 students ea.

Countering Violent Extremist - Media Production – Maymester (1 course offering),  
12 Students, 2016

#### **UG Independent Study**

Kri Schaffer - Mix and Master Audio – FA2019

Branson Inscore – Mix and Master Audio – SP2019

Shawn Gillooly –Podcast – Comm Faculty: deception and hate FA2018

Caique Vidal de Oliveria - Mix and Master Audio – FA2018

Hollie Rutledge – Advanced Editing – FA2017

Alexis Barnes – 3D Audio landscaping – SP2017

Matt Clifton – Audio Mix – SP2016



Kelly Pope – Sound Treatment Principles and Practice - SP2015  
Kevin Renshaw – Audio Mix and Master - SP2015  
Christina Luke – Audio Mix – FA2015  
Kelly Swanson – Audio and Independent Cinema – FA2015  
Alex Joiner – Adv. Mix and Master Audio SP2014  
Rebecca Burnette – 3-D Modeling SP2014  
Alex Joiner – Adv. Mix and Master Audio FA2013

UG Honors Committee Member:

Hannah Ball  
David Von Dokkum – Comp. Lit.  
Edward Perkins

UG TA Comm 130 Internship – Mentor more than 20 students – 5 year span;

**Guest Lectures, Presentations, Workshops**

2005 – present, *VO recording, Camera Movement, Lighting, Audio, Video Tech.*  
2013, *Intro to Arduino Prototyping and Interfacing*, UNC-CH.  
2013, *Basic Electronics*, UNC-CH.  
2011, *Advanced Audio Engineering Principles*, Dept. Music .UNC-CH.  
2011, *Shaping the Acoustic Aesthetic*, UNC-CH.  
2010, *Shaping the Acoustic Aesthetic*, Comp. Sci. UNC-CH.  
2002, 2003, *PhotoShop: Application, Development, Web*, UNC-CH.  
2001, *Experimental Audio and Video production: Web Technologies*, UNC-CH.  
2001, *Experimental Audio: Achieving Sound as Art*, UNC-CH  
1998, *Use of Non-synchronous Audio in Web Animation*, Alamance Community College, Burlington, NC.  
1996, *LASOHALO: Found Sound – Cut, Paste and Loop*, Massachusetts College of Art. Boston, Mass.

**Juried Shows**

1993, WVAA Juried Show, Wake Visual Art Assoc., Raleigh, N.C.  
1993, Durham Art Guild Juried Show, Durham Art Guild, Durham, N.C.  
1992, Triangle Clay Show, Artspace, Raleigh, N.C.  
1992, Durham Art Guild Juried Show, Durham Art Guild, Durham, N.C.  
1991, Senior Show, Allcott Glass Gallery, Hanes Art Center, Chapel Hill, N.C.  
1991, Undergraduate Awards Show, Allcott Gallery, Hanes Art Center, CH, N.C.

**Grants**

2005 – present, Awarded total over \$420,000 in non-personnel funding proposals

2018, University Research Council Award (with Dr. Cori Dauber) \$3,000.00 for payment to Taylor and Francis for article to appear in the open

2017, \$866,687 (with Dr. Cori Dauber) Homeland Security Community Engagement CVE Grant for "Peer-to-Peer" Video Production (Grant awarded under Obama administration; rescinded under Trump administration after decision to change grant criteria)

2010, WAPI and Wired Access Initiative via grant to upgrade, replace, and map entire Swain Ethernet/Internet wireless service. Grant awarded at no Departmental cost. Proposal was adopted by Gogan as the model for all incoming ITS grants under this initiative.

2004, North Carolina Zoological Park: Touch and Learn Center, Solidzebra, inc, principle, 100%, award budget: \$2,300,000.

2003, North Carolina Zoological Park: Honeybee and Colony Insects, Solidzebra, inc, principle, 100%, award budget: \$160,000.

2001-2002, North Carolina Zoological Park: Aviary Exhibit Design, Solidzebra, inc, principle, 100%, award budget: \$350,000.

### **Professional Service**

2004 - present MP Awards committee

2004 – present, Hollywood internship committee, alumni relations, fund raising and attendance of Hollywood event

2004 – present, Staff Search Committee Member (7 SHRA, 4 times chair of search committee)

2018-19, Laid foundation for innovative research partnership with Booz, Allen, and Hamilton

2012-16, 2018-19, Juror. Swain Lot Festival

2013, 12, 09, 07 Faculty Search Committee Member (2 tenure and 2 EPA Faculty positions) Rankus, Haslett, Shi, Hondros

2004-present, Juror Eva Marie Saint- Jeffrey Hayden Award.

2006 – 17, *UNC-STV (Student Television)*

Member of Board of Directors

Faculty Advisor

2006 – 17 *UNC Digital Storylab* , Faculty Advisor

2011, UNC-CH Information Technology Committee.

2002-2010, Juror, Creator - Carolina Film Festival.

2004 – 2009 *CPG (Carolina Production Guild)*, Faculty Adviser

2006 – 08 Co-developer - *iTunesU Carolina*

– member of founders/administrators

Technical and Audio Advisor on three UNC Innovation Grants.

Principle Investigators: 1) Prof. Joyce Rudinsky, 2) Prof. Joseph Megel, and  
3) Dr. Mark Katz

**Multimedia, Software and Computer Skills**

Arduino, Processing; Terminal; UNIX

System Administration: Mac hardware and software.

PC hardware and software -- Windows (95 - current)

Media: Adobe Creative Cloud, ProTools, Logic Pro, Renoise, Reaper, Studio Vision  
Pro, Sound Designer, Sound Forge, Audition, Cubase VST, Sonar Producer,  
Sound Edit 16, Peak, Audacity, Soundtrack Pro, Reason, Opcode OMS, MIDI,  
Premiere Pro & Creative Cloud, Final Cut Pro Studio--FCP 7, Media-100, Avid,  
QuickTime, Sorenson, Media Cleaner Pro. Proficient in Media Export, codecs and  
compression

SD to UHD, audio and video

3-D Printing

MS Office