

Sha Xin Wei Curriculum Vitae

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Biographical Information

Employment History

Director and Professor, School of Arts Media and Engineering, Arizona State University, 2014 - present

Associate Professor. Faculty of Fine Arts, Concordia University, 2005 - 2013.

Canada Research Chair, Media Arts and Sciences, Concordia University, 2005 - 2013.

Director, Topological Media Lab, 2001 - 2013.

Assistant Professor. School of Literature, Communication and Culture, Center for New Media, and Graphics, Visualization & Usability Center, College of Computing, Georgia Institute of Technology, 2001 - 2005.

1998-1999. Researcher, Interval Research Corporation.

Basic research in mathematics of unsupervised learning. Developed and disseminated methods for computer vision based on geometric evolution.

1995-1998. Human-Computer Systems Architect and Senior Researcher, Academic Systems Development Project, Stanford University.

1991-1995. Systems Architect and Technical Lead.

1985-1990. Project Leader, Framework Developer, Course Authoring Tools Project.

1984-1985. Project Lead, Scientific Programmer, Faculty Author Development Project.

Academic History

Academic History

Affiliate Professor, School of Complex Adaptive Systems, Global Futures, 2021-

Professor, Philosophy, Art and Critical Thought, European Graduate School, 2017-

Fellow, ASU-Santa Fe Institute Center for Biosocial Complex Systems, 2015-

Affiliate Professor, School of Future Innovation in Society, ASU, 2015-

Affiliate Professor, CIDSE, ASU, 2015-

Affiliate Professor, English, ASU, 2015-

Intel Fellow, Copenhagen Institute of Interaction Design, 2013-2014.

Mellon Fellow, Gray Center for Arts and Inquiry, Chicago University, 2012-2013.

Adjunct Professor of Visual Studies, Duke University, 2011-

Visiting Scholar, Centre for Modern Thought, Aberdeen University, 2011.

- Academic History**
- Visiting Scholar, Department of French and Italian, Stanford University, 2009-2010.
 Visiting Scholar, History of Science Department, Harvard University, 2004-2005.
 Visiting Scholar, Program in Science, Technology, and Society, MIT, 2004-2005.
 Ph.D. Mathematics Department, Stanford University, 2001. Fields: differential geometry, partial differential equations, geometric measure theory; Critical and cultural studies of mathematics, science and technology.
- Dissertation**
- Dissertation: Differential Geometric Performance & the Technologies of Writing. (295 pp.)
 Advisor: Rafe Mazzeo (Mathematics). Readers: Tim Lenoir (History and Philosophy of Science) and Terry Winograd (Computer Science).
- Visiting Scholar - History and Philosophy of Science, Stanford, 1998-2000.
 M.A. Mathematics, Stanford University, 1981
 A.B. Mathematics cum laude, Harvard University, 1979.
- Research Interests**
- Critical studies of technology and of media arts and sciences; gesture, materiality, performance and architecture.
 Computer science: responsive media spaces, topological and computational media, wearables, gesture-based interaction; visualization and simulation.
 Continuum and process philosophies. Phenomenology of differential geometry.
- Research Publications**
- Research**
- Books Special Volumes**
- Poiesis and Enchantment in Topological Matter, monograph, MIT Press, 2014.
 Special Issue: Poetic and Speculative Architectures in Public Space, *AI & Society* 26.2, Springer-Verlag, May 2011.
- Chapters in Books or Special Volumes**
- with *Garrett Laroy Johnson*. "Rhythm and Textural Temporality: Experience without Subject and Duration as Effect." In Rhythm and Critique: Technics, Culture and Capital, ed. Paola Crespi and Sunil Manghani. University of Edinburgh Press, 2020, 101-123.
 with Brandon Mechtley, Todd Ingalls, Julian Stein, Connor Rawls. 2019. SC: A Modular Software Suite for Composing Continuously-Evolving Responsive Environments. In: Philip Beesley, Sascha Hastings, Sarah Bonnemaïson (eds.) Living Architecture Systems Group White Papers. Kitchener, Ontario: Riverside Architectural Press.
 "In conversation: Catherine Wood and Sha Xin Wei," in Mirror-Touch Synaesthesia: Thresholds of Empathy with Art, ed. Daria Martin, Oxford Press, 2018, ch 16.
 "Theater Without Organs: Co-Articulating Gesture and Substrate in Responsive Environments," in Living Architecture Systems Group White Papers, ed. Philip Beesley and Ala Roushan, Toronto: Riverside Architectural Press, 2016, pp. 276-291.

Publications

"X is for Signature," in "Ink: V is for Vermillion as described by Vitruvius, An A to Z of Ink in Architecture," Graduate School of Architecture, Planning + Preservation, Columbia University, 2013.

"Prospective Architectures of Enchantment," in 70 Jähren Festschrift Dedicated to Professor Helgi-Jon Schweizer, 2009.

"Whitehead and Poetical Mathematics," in Deleuze, Whitehead and the Transformations of Metaphysics. eds. Andre Cloots & Keith A. Robinson. Belgium: KAVV, 2005, pp. 107- 116.

"Poetics of Performative Space," in Cognition, Communication and Interaction: Transdisciplinary Perspectives on Interactive Technology (Human-Computer Interaction Series), ed. Satinder Gill, Berlin: Springer-Verlag, 2007, pp. 549-566.

Timothy Lenoir and Sha Xin Wei, "Authorship and Surgery: The Shifting Ontology of the Virtual Surgeon," in Bruce Clarke and Linda Dalrymple Henderson, ed., From Energy to Information: Representation in Science and Technology, Art, and Literature, Stanford University Press, 2002, pp. 283-308, pp. 415-419.

"Cathedral, Tool or Framework? MediaWeaver As a Distributed Scholarly Workspace," in Augmenting Comprehension: Digital Tools and the History of Ideas, ed. Dino Buzzetti, Giuliano Pancaldi, and Harold Short, (London: Office for Humanities Communication, Kings College London), 2004, pp. 101-112.

Works in Progress:

"Indeterminacy and Ontogenesis," chapter in A Margin of Indetermination: Plasticity and Contingency in Everyday Technologies, ed. Natasha Lushetich & Iain Campbell.

"Zombie Expertise," in Designing Planetary Expertise, eds. Adam Nocek & Steven Loo, special volume for Grey Room.

"Writing in Water: Dense Responsive Media Beyond Relational Interfaces," in Relational Interfaces, ed. Satinder Gill, Springer-Verlag (chapter in progress).

Emergence, Ontogenesis, Individuation, editor, AI & Society, Springer-Verlag (volume in progress).

Mathematics, Writing, Poiesis, editor, collection of essays by collaborators in literary studies and philosophy (volume in progress).

Phenomenology of Differential Geometric Writing, favorably reviewed by MIT Press (book in progress).

Window Washing, art book, on writing and time (essay in progress).

Q is for Quicken, art book, on alchemy, noise and the sea (essay in progress).

Refereed Publications
(students in italics)**Refereed Publications**

"The Square Root of Negative One is Imaginary." In Special Issue on Ontogenetic Process, edited by Cary Wolfe and Adam Nocek. *Angelaki* 25.3 2020, 64-82.

Yanjun Lyu, Brandon Mechtley, Lauren Hayes, Sha Xin Wei. "Tableware: Social

Refereed Publications

- Coordination through Computationally Augmented Everyday Objects Using Auditory Feedback." HCI International 2020. 14 pages.
- Seth Dominic Thorn, Halley Willcox, and Sha Xin Wei. "Processual and Experiential Design in Wearable Music Workshopping." In Proceedings of ACM Conference on Movement & Computing, Jersey City, NJ USA, July 2020 (MOCO'20), 8 pages.
- Shomit Barua, Yanjun Lyu, Connor Rawls, Peter Weisman, Christy Spackman, Xin Wei Sha, "tivity Café: Prototyping the Dining Event," ISEA 2020.
- with Seth Thorn, "Instruments of Articulation, Gesture Signal Processing in Live Performance," MOCO 2019.
- Brandon Mechtley, Todd Ingalls, Lauren Hayes, Julian Stein, *Garrett Johnson*, Byron Lahey, Jessica Rajko, Seth Thorn, *Emiddio Vasquez*, Connor Rawls, Assegid Kidane, Sha Xin Wei, "Composing Ecosystemically in Responsive Environments with Gestural Media, Objects and Textures," 17-19 March 2019, ASU Tempe AZ, improvisationalenvironments.weebly.com
- Brandon Mechtley, Christopher Roberts, Julian Stein, *Benjamin Nandin*, Sha Xin Wei, "Enactive Steering of an Experiential Model of the Atmosphere," Human-Computer Interaction International, Las Vegas, 15-20 July 2018.
- Michael Krzyzaniak*, *Rushil Anirudh*, *Vinay Venkataraman*, Pavan Turaga, Sha Xin Wei, "Towards Realtime Measurement of Connectedness in Human Movement," 2nd International Workshop on Movement and Computing Intersecting Art, Meaning, Cognition, Technology — Simon Fraser University, 14-15 August 2015.
- Evan Montpellier*, *Nikos Chandolias*, *Assegid Kidane*, *Garrett Johnson*, *Omar Faleh*, Todd Ingalls, Sha Xin Wei, "Suturing Space: Tabletop Portals for Collaboration," HCI International, Los Angeles, 5-7 August 2015.
- Navid Navab*, *Doug van Nort*, Sha Xin Wei, "A Material Computational Approach to Gestural Sound," NIME Goldsmiths 2014.
- Nikolaos Chandolias*, Sha Xin Wei, "Speech Platform For a Story Telling Room," ACM Multimedia, Barcelona, October 21-25, 2013.
- Omar Faleh*, *Julian Stein*, Sha Xin Wei "Amorphous lighting network in controlled physical environments," CHI Paris, April 27 - May 2, 2013.
- "Sha, Xin Wei, *Adrian Freed*, *Navid Navab*, "Sound Design As Human Matter Interaction," Computer-Human Interaction, Paris, April 2013.
- "Topology and Morphogenesis," Special Issue on a Topological Approach to Cultural Dynamics, ed. Celia Lury, *Theory, Culture and Society*, 29.4-5, July–September, Nottingham Trent: TCS Centre, 2012, 220–246.
- "An Experiment in Autonomous Cultural Production", *AI and Society 25th Anniversary Special Issue*, London: Springer-Verlag, 2012. Online 10.1007/s00146-012-0416-0, 13 pp.
- "The Atelier-Lab as a Transversal Machine," *Les études américaines à l'ère des médias numériques : nouveaux objets, nouvelles pratiques*, ed. Yves Abrioux, *Revue Française d'Études Américaines*, 2011/2, no. 128, p. 62-78, color plates I-VIII.
- with *Michael Fortin*, *Navid Navab*, *Tim Sutton*, "Ozone: Continuous State-based Media

Refereed Publications

- Choreography System for Live Performance," ACM Multimedia, Firenze, October 2010, 1383-1392.
- "Calligraphic Video: Using the Body's Intuition of Matter," Inaugural Issue of the International Journal of Creative Interfaces and Computer Graphics, 2009.
- Sha Xin Wei, *Michael Fortin, Jean-Sebastien Rousseau*, "Calligraphic Video: A Phenomenological Approach to Dense Visual Interaction," ACM Multimedia, Beijing China, 19-24 October 2009.
- with *Doug Van Nort, David Gauthier, Marcelo M. Wanderley*, "Extraction of Gestural Meaning from a Fabric-Based Instrument," ICMC International Computer Music Conference Proceedings, 2007.
- with *David Birnbaum, Freida Abtan, Marcelo M. Wanderley*, "Mapping and Dimensionality of a Cloth-based Sound Instrument," Proceedings of Sound and Music Computing (SMC), Lefkada Greece, 11-13 July 2007.
- "Poetics of Performative Space," AI & Society 21.4, in 20th Anniversary Birthday Issue: From Judgement to Calculation, June 2007, 607-624.
- "Ethico-aesthetics in t* Performative Spaces," in TRG: On Transient Realities and Their Generators, eds. Maja Kuzmanovic and Tim Boykett, Kibla, 2006, 22-39.
- "Whitehead's Poetical Mathematics," Configurations, 13.1, 2005, 77-94.
- "Whitehead and Poetical Mathematics," In Deleuze, Whitehead and the Transformations of Metaphysics. eds. Andre Cloots & Keith A. Robinson. (Belgium: KVAV, 2005), 107-116.
- "The TGarden Experimental Performance Project," Modern Drama, Volume 48, Number 3, Special Issue: Technology, Toronto: University of Toronto Press, Fall 2005, 585-608.
- Sha Xin Wei and Satinder Gill. "Gesture and Response in Field-Based Performance," 5th conference on Creativity & Cognition. Ed. University of Technology Sydney Ernest Edmonds, Australia. London: ACM, 2005, 205-09.
- Chris Salter and Sha Xin Wei, "Sponge: A Case Study in Practice-Based Collaborative Art Research," 5th conference on Creativity & Cognition, ed. University of Technology Sydney Ernest Edmonds, Australia, London: ACM, 2005, 92-101.
- "Differential Geometrical Performance and Poiesis," in Configurations, Vol 12, Number 1, Winter 2004, 133-160.
- with *Yoichiro Serita, Jill Fantauzza, Steven Dow, Giovanni Iachello, Vincent Fiano, Joey Berzowska, Yvonne Caravia, Delphine Nain, Wolfgang Reitberger, Julien Fistre*, "Expressive Softwear and Ambient Media," in Adjunct Proceedings of Ubicomp 2003, 131-136.
- "Continuous Sensing of Gesture for Control of Audio-Visual Media," with *Giovanni Iachello, Steven Dow, Yoichiro Serita, Tazama St. Julien, Julien Fistre*, in ISWC 2003 Proceedings, pp. 236-237. <http://csdl2.computer.org/persagen/DLAbsToc.jsp?resourcePath=/dl/proceedings/&toc=http://csdl2.computer.org/comp/proceedings/iswc/2003/2034/00/2034toc.xml>
- "Resistance Is Fertile: Gesture and Agency in the Field of Responsive Media," in Makeover: Writing the Body into the Posthuman Technoscape, Two-Part Special Issue, Baltimore:

Refereed Publications

Johns Hopkins University Press, Part 2: Configurations, Vol 10, Number 3, Summer 2002, 439-472.

"Sustainable Arenas for Weedy Sociality | Distributed Wilderness," with Maja Kuzmanovic, Proceedings CPSR Directions and Implications of Advanced Computing Symposium in Seattle DIAC 2002, 113 - 119.

"Speechpainting - An Architectural Medium," FineArtForum, vol 15, no. 10, October 2001.

"Sponge, The Surface That Holds the Image is Unstable," with sponge, *éc/artsS:#2[00_01], Spécial: Textualités & Nouvelles Technologies*, Fall 2000.

Sha Xin Wei and Maja Kuzmanovic, "From Representation to Performance: Responsive Public Space," Proceedings CPSR Directions and Implications of Advanced Computing, Seattle Symposium (DIAC 2000).

"The Virtual Edge – Tracing the Postmodern Surgeon," with Tim Lenoir, Proceedings of Energy To Information Conference in Austin, Texas, April 3-5, 1997.

James Ze Wang, Gio Wiederhold, Oscar Firschein, Sha Xin Wei, "Content-Based Image Indexing and Searworksching Using Daubechies' Wavelets," *Int. J. on Dgiital Libraries* 1.4 (1998) 311-28.

"Wavelet-Based Image Indexing Techniques with Partial Sketch Retrieval Capability." with James Ze Wang, Gio Wiederhold, Oscar Firschein, *Advances in Digital Libraries* (1997).

"MediaWeaver and Networked Scholarly Workspaces." *Multimedia Systems Journal* 6.2 (1996) 97-111.

"MMDB: A Meta-testbed for Distributed Multimedia." Proceedings of AAAI Workshop Indexing and Reuse in Multimedia Systems (1994).

with Haas, Cathy, "Stanford American Sign Language videodisc project," in Proceedings of the Johns Hopkins National Search for Computing Applications to Assist Persons with Disabilities. Los Alamitos, CA : IEEE Comput. Soc. Pr. (1992) 41-44.

Technical Reports & Reviews**Technical Reports**

"TGarden Media Choreography System," with Blair MacIntyre, Graphics, Visualization and Usability Center, Georgia Institute of Technology, 2002.

"Oz Specification: A Media Evolution Engine Based on Hybrid Real-time Continuous and Discrete Dynamical Systems." Technical Report, School of Literature, Communication and Culture, Center for New Media, Georgia Institute of Technology, 2001.

"TG2002 Architecture." Technical Report, School of Literature, Communication and Culture, Center for New Media, Georgia Institute of Technology, 2001.

"The Blackboard As a Collaborative Learning Technology." Computer-Supported Collaborative Learning (2000).

"The Geometer's Workbench: An Experiment in Interacting with a Large, High Resolution Display," with Françoise Guimbretière and Terry Winograd, Stanford CS Technical Report CS-TR-2000-05, May 2000. (paper http://graphics.stanford.edu/~francois/video_stubs/Geometer.ram).

Technical Reports & Reviews

"Scholarly Spaces," Technical Report, Academic Software Development, Stanford University, 1996.

"An Object-oriented Multimedia, Distributed Meta-database," Technical Report, Academic Software Development, Stanford University, 1994.

Reviews Published

"The Tortoise *and* the Hare, Review of InterCall 2.0." *Mathematica Journal* 4.1, 1994, pp. 22-25.

"Review of Mathematica 2.0." *Computers and Mathematics, Notices of the American Mathematics*, 1992, pp. 428-430.

"Review of Milo." *Computers and Mathematics, Notices of the American Mathematics*, 1989, pp. 991-993.

Popular Media**Popular Media**

"Big Data," with Gabriele Weimin Carotti-Sha, *Curmudgeon Corner, AI & Society*, 2016, pp. 1-4.

Creation / Research
*(students in italics)***Exhibitions Curated****Exhibitions Curated**

Vernissage and Open Atelier, Concordia University Blackbox: Butterfly Stroke: *Anahita Dehnonehie, Elena Frantova*; Numinal: *Flower Lunn*; Pendulum: *Rosalie Dumont Gagné*; Troglodyte: *Erik Conrad, Justyna Latek, Josée-Anne Drolet*, Hexagram-Concordia, Montreal Canada, 12 May 2006.

"Teleopolis," an exhibition on the mediated city, with works by Sha Xin Wei, Sponge, Erik Adigard, Ken Goldberg, Adrian Van Allen, David Karam & Gigi Obrecht, Steve Wilson, 2nd Wednesdays Art Series at the San Francisco Exploratorium, San Francisco USA, February 2002.

Exhibitions - Solo Creative Work**Exhibitions - Solo Creative Work**

"Q is for Quicken," gesture-sensitive, sounding paper installation, with Chris Wood (integrated fabrication), Navid Navab (sound design & programming), Assegid Kidane (electronics), Oana Suteu (composition, research), Intel-CIID Fellowship 2013-2014, Copenhagen Institute for Interaction Design.

"Play and Morphogenesis II," Comprovisation - Improvisation Technologies in the Performing Arts, Concordia University, May 25, 2012, with *Navid Navab*.

"Play and Morphogenesis I," gesture-mapping sound installation-performance, with *Navid Navab, Julian Stein*, Mondavi Center, UC Davis, April 12, 2012.

"Il y a," 2 video-channel, 12 audio-channel membrane installation, Berkeley, with Scott Minneman, *Navid Navab, Morgan Sutherland, Jean-Sébastien Rousseau, Harry Smoak, Lina Dib, Josée-Anne Drolet*, 6-9 December 2012.

"Il y a," 2 video-channel, 12 audio-channel membrane installation, premiered September 16, 2010, Stanford CCRMA Summer Concert, with Scott Minneman, *Navid Navab, Morgan Sutherland, Jean-Sébastien Rousseau, Harry Smoak, Lina Dib, Josée-Anne*

**Exhibitions - Solo
Creative Work**

Drolet.

"Ouija New York," Installation-event, Harvestworks Inside, 20 Greene Street, New York City, May 15, 2009, with Clarinda Mac Low, *Morgan Sutherland, JS Rousseau, Navid Navab*, TML.

"Meteor Shower," Responsive video installation, Portland Maine USA, November 1-4, 2007 with *Jean-Sébastien Rousseau, Tim Sutton, Emmanuel Thivierge*.

"Cosmicomics Eureka," Suspended rear screen responsive video projection, Exhibited in Hexagram Blackbox, Concordia University, Montréal, May 2007, with *Jean-Sébastien Rousseau, Tim Sutton, Emmanuel Thivierge, Josée-Anne Drolet*. http://www.topologicalmedialab.net/joomla/main/index.php?option=com_content&task=view&id=151&Itemid=74

"Cosmicomics Elektra," Suspended plasma screen responsive video installation, Exhibited in Usine-C, Part of Elektra Festival Montréal, May 2007 with *Jean-Sébastien Rousseau, Tim Sutton, Emmanuel Thivierge, Josée-Anne Drolet, Olfa Driss, Michael Fortin, Harry Smoak*. <http://www.topologicalmedialab.net/joomla/main/content/view/152/72/lang,en/>

"Membrane: Van Nelle Ontwerpfabriek 1930," calligraphic video installation, DEAF04: Dutch Electronic Art Festival, V2, Rotterdam, November 9-21, 2004 with *Harry Smoak, Yoichiro Serita, Chris Salter, Delphine Nain, Maria Cordell*.

"Membrane Memory," Responsive Video Projection Installation, "FIVE: Five Media, Five Faculty from Georgia Tech Architecture Program," Portman SunTrust Gallery, Atlanta, April-May 2004.

"Expressive softwear for TGarden responsive playspaces," Ubicomp Demonstration 2003, with *Joey Berzowska, Arek Basirisk, Jill Fantauzza, Yvonne Caravia*.

"Greeting dynamics using expressive softwear," Ubicomp Demonstration 2003, with *Jill Fantauzza, Stephen Dow, Giovanni Iachello*, and *Joey Berzowska*, pp. 131 - 136.

"Soft architecture: ambient responsive media for collective and parallel play," Ubicomp Demonstration 2003," with *Yoichiro Serita, Pegah Zamani, Delphine Nain*.

"Gestural audio softwear instruments," Ubicomp Demonstration 2003, with *Yoichiro Serita, Stephen Dow, Giovanni Iachello, Julian Fistre*.

"Frank's Ears" speechpainting installation, Georgia State University, Atlanta, 2003.

"Hubbub Study," speech-driven dynamic typography, Technopoetry Festival, Atlanta, 2002.

"Plaza Teleopolis," speech & animated glyph projection, San Francisco Exploratorium, 2nd Wednesdays, 2002.

**Exhibitions - Group
Creative Work****Exhibitions Creative Work - Group** (*italics mark students & apprentices*)

"Time Lenses / Palimpsest," responsive video installation, with *Julian Stein, Oana Suteu Khintirian, Todd Ingalls*, "Les corps dessinant," Musée des arts et métiers Paris, December 2016.

"Time Lenses Study," Embodied Engagement," with *Julian Stein, Todd Ingalls*, Beall Art Center, UC Irvine, October 2016 - January 2017.

**Exhibitions - Group
Creative Work**

- "Ice Time Candle Time Water Time Tissue Time Time," Sha Xin Wei, *Navid Navab, Julian Stein*, Time Forms, September 18-21, 2013, CIRMMT, McGill University, Montreal.
- CIDZIY (WYSIWYG 2012), David Gauthier, Marguerite Bromley, Joanna Berzowska, "Click! New Media Arts Festival," Helsingor, Denmark, 20 April - 5 May 2012.
- "Canada Research Chairs Lab Launch," Topological Media Lab, with Faculty of Fine Arts, Office of Research, Concordia University, February 15 - March 6, 2009.
- "E-Sea," installation (CNC cut cardboard, plastic cells, LEDs, photocells, ultrasound sensors), with Peter Hasdell, *Patrick Harrop*, Josh Bolchover, TML, Pneuma, ESKI and Dedale studios, eArts Festival, Shanghai China, October 17-22, 2008.
- "Pneus," installation (plastic cells, LEDs, photocells, sound processing, responsive video projection), with *Patrick Harrop*, TML, and Dedale Studio, Champ Libre Forest, Galerie Monopoli, Palais des Congres, Montreal, September 24-28, 2008.
- "Remedios Terrarium," responsive environment and installation-events, with Topological Media Lab and Dedale Studio, Fine Arts Gallery, Concordia University, Montréal, <http://topologicalmedialab.net/remediosterrarium/>, March 19 - April 4, 2008.
- "Visible Silence," performance-installation experiment, Livia Daza-Paris, Artistic Director, contribution: media artist and advisor, Studio 303 May 2006.
- "Kyo's Dream," with *Yvonne Caravia*, Kathleen Goonan, Brian Fisher, Flash animation and electronic publication, Horizon,14, 2005.
- "Sauna02" outdoor interactive immersion machine, with sponge, The Lab, San Francisco, 2002.
- "Sauna Study," interactive installation, with sponge, San Francisco Exploratorium, 2nd Wednesdays, 2002.
- "Slip," multi-perspective video installation, with Tirtza Even, Postmasters, New York City, USA, 2001.

*Creative and Technical Lead:
TGarden Environments*

- "TG2001," responsive environment, with TGarden Consortium, V2, Rotterdam, Netherlands, 2001.
- "TG2001," open lab, with TGarden Consortium, Ars Electronica 2001, Linz Austria.
- "TGarden," responsive environment: fabric, sound and projected video, Medi@terra 2000, Athens, Greece, with FoAM and sponge.
- "TGarden," responsive space, Siggraph 2000, New Orleans, with FoAM and sponge.
- "m3" digital art, 3d animation and video, with sponge, 1999.
- "m2" installation/performance/concert at The Lab, San Francisco, with sponge. Documented as interactive cdrom, 1998.
- "Global Demographics." Simulation & video, *Mathematica Journal* 2.4, 1994.
- American Sign Language Interactive Videodisc Project. With Cathy Haas. Videodisc and software, 1992.

**Exhibitions - Group
Creative Work**

Cabrera Physics Simulations: mechanics, electromagnetism, statistical mechanics, 1985-1986.

**Organized Workshops
Chaired Panels**

Organized Conferences, Workshops & Chaired Panels

[“Indeterminacy, Ontogenesis and Play Workshop,”](#) with Emiddio Vasquez, 6 November 2020, Indeterminate Futures / The Future of Indeterminacy, University of Dundee.

“Prototyping Social Forms Workshops.” with Gabriele Carotti-Sha, *Sophie Strassmann*, Muindi F Muindi, *Garrett L Johnson*, *Adrita Khan*, Anita Parmar, Brandon Mechtley, *Cordelia Dingle*, Damian Arteca, Erik Bordeleau, *Khando Langri*, Oana Suteu, Elizeveta Solomonova, Rebecca Brosseau, Satinder Gill, *Shomit Barua*, Sophie Zhao, *Stanzi Vaubel*, Sha Xin Wei, *Yanjun Lyu*, Ylfa Muindi, *Yves Abanda*. Synthesis ASU, Building21 McGill, Montreal, Winter-Spring 2020.

“Synthesis + Leonardo Workshop: Empires, Villages, Ecologies of Experimental Practices,” ISEA 2020.

“Responsive Environments Workshop,” with Brandon Michael Mechtley, Todd Ingalls, Lauren Hayes, Byron Lahey, Jessica Rajko, Seth Dominicus Thorn, Robert LiKamWa, Julian Stein, *Garrett Johnson*, *Oswaldo Emiddio Vasquez*, Connor Rawls, Peter Weisman, Assegid Kidane, Chris Ziegler. TEI 2019, 17 March 2019. <http://tei.acm.org/2019/program/studios.html#S5>, <https://responsiveenvironments2019.weebly.com>

“Ontogenesis 3: Beyond Complexity,” IAS (Amsterdam), 6-7 September 2018, Convened by Adam Nocek; with Giuseppe Longo (ENS Paris), Stuart Kauffman, Cary Wolfe (Rice), Phillip Thurtle (U Washington), Gaymon Bennett (ASU), Helga Wild, Patricia Pisters (U Amsterdam).

“Atmosphere Workshop,” Synthesis ASU, 14 February - 3 March 2018, with *Desiree Foerster*, *Nima Navab*, *Thierry Dumont*, *Emiddio Vasquez*.

“Ontogenesis 2,” Santa Fe (New Mexico), 8-12 February 2018, with Adam Nocek, Stuart Kauffman, Michael Epperson (CSU Sacramento), Cary Wolfe (Rice), Phillip Thurtle (U Washington), Gaymon Bennett (ASU), Helga Wild, Niklas Damiris, Erin Espelie (Colorado).

“Serra Vegetal Life Through Movement,” Le Conservatoire de musique et d’art dramatique du Québec, 19 June - 14 July 2017, with Oana Suteu Khintirian, Todd Ingalls, Julian Stein, Justin Dubé-Fahmy, Nina Bouchard, Evan Montpellier.

“Ontogenesis,” Santa Fe (New Mexico), 19-23 April 2017, with Adam Nocek, Stuart Kauffman, Michael Epperson (CSU Sacramento), Cary Wolfe (Rice), Phillip Thurtle (U Washington), Gaymon Bennett (ASU).

“Panel on Experimental Collective Experience,” Body of Knowledge, Irvine, 8-10 December 2016.

“Heartbeat Residency: Choreography and Composition of Internal Time,” iStage Arizona State University, John MacCallum, Teoma Naccarato, with *Michael Krzyzaniak*, *Rushil Anirudh*, *Qiao Wang*, *Garrett Johnson*, Julie Akerly, *Connor Rawls*, *Varsha Iyengar*, Jessica Rajko, Christian Ziegler, Grisha Coleman, Assegid Kidane, Pete Weisman, Chris Roberts, Kristi Garboushian. February 15- 20, 2015. <http://rhythmanalysis.weebly.com>

“Lighting and Rhythm,” iStage Arizona State University, with Chris Ziegler, Sha Xin Wei, Pavan Turaga, *Garrett Johnson*, *Omar Faleh*, *Michael Bateman*, *Ian Shelanskey*,

**Organized Workshops
Chaired Panels**

Aniket Sarangdhar, Varsha Iyengar, Vickie Hall, Chris Roberts, Kristi Garboushian, Pete Weisman, Assegid Kidane, Eleanor Hanafin, November 17- 26, 2014. <http://lightingrhythm.weebly.com>

“Media Choreography in Everyday Space Workshop,” Brickyard Fulton Schools of Engineering, ASU, with *Katie Jung, Julian Stein, Garrett Johnson, Byron Lahey, Cooper Sanghyun Yoo, Matthew Briggs, Kevin Klawinski, Tain Barzso, Assegid Kidane, Pete Weisman, Luke Katz, Kristi Garboushian*, June 1 - August 18, 2014.

“Synthesis: Improvisational Environments Residency,” iStage Arizona State University, with *Julie Akerly, Tain Barzso, Chinmay Nrusinha Dharmadhikari, Adrian Freed, Kristi Garboushian, Todd Ingalls, Garrett Johnson, Katie Jung, Assegid Kidane, Michael Krzyzaniak, Byron Lahey, Evan Montpellier, Navid Navab, Garth Paine, Julian Stein, Kim Swisher, Peter Weisman, Cooper Sanghyun Yoo, Chris Ziegler*, February 15 - March 8, 2014. <http://improvisationalenvironments.weebly.com/>

“Synthesis-TML: Rhythm, Sound and Light Workshop with Julian Stein,” iStage Arizona State University, December 12-13, 2013.

“Synthesis-TML: Realtime Video Workshop with Evan Montpellier,” iStage Arizona State University, November 21-22, 2013.

“Play As Inquiry,” Gray Center for Arts and Inquiry, The University of Chicago, with Manual Cinema, George Lewis, Michael Montanaro, Michael Taussig, October 31 - November 3, 2013.

“Synthesis-TML: Realtime Sound Workshop with Navid Navab,” iStage Arizona State University, October 24-25, 2013.

“Whole-Body Movement and Responsive Media,” Drama Studio, Concordia University, with *Dr. Vangelis Lympouridis, Adrian Freed, Navid Navab, Julian Stein, Teoma Naccarato, JoDee Allen, Dr. Jen Spiegel, Nikos Chandolias, Liza Solomonova*, students in Drama and Contemporary Dance departments, December 7-17, 2012.

“Movement-based Experiment with Temporal Textures,” Hexagram Blackbox Workshop, Concordia University, February 17-28, 2012, with *F. Abtan, O. Faleh, N. Navab, J. Stein, K. Jung*,

“Gesture-bending Movement and Media,” Topological Media Lab & Centre for Music and Science Workshop, February 6-13, Cambridge University, with Michael Montanaro, *Navid Navab, Satinder Gill*.

SECT VII, Rewired:Asia, University of Hawaii Manoa, August 1-10, 2011, Workshop Instructor.

Frankenstein’s Ghosts, Blackbox Residency, Concordia University, with Michael Montanaro, Ann-Marie Donovan, Liselyn Adams, Blue Riders and TML June 2011.

Topology and Morphogenesis Workshop, with Yves Abrioux (Paris 8), Stamatia Portanova (University of London Birkbeck), Thomas Jellis (Oxford), Centre for Modern Thought, Aberdeen, 30 May 2011.

Third International Conference on Music and Gesture, March 5 – 6, 2010, Centre for Interdisciplinary Research in Music Media and Technology and Schulich School of Music, McGill University, Montreal, Canada. Co-organized with Marcelo Wanderley, Jon Wild.

**Organized Workshops
Chaired Panels**

- Visiting Speaker Series: Brian Rotman (Ohio State University) "The Alphabet, Ghosts, Distributed Being Becoming Beside Ourselves in the Digital Era," Centre For Interdisciplinary Studies in Society and Culture Concordia, Montreal, March 4, 2010.
- "Whitehead+Cosmopolitics Panels III & IV: Novel Ecologies of Practice," Society for Literature, Science, and the Arts (SLSA), Atlanta, 5-8 November 2009.
- "Soft Architecture Dedale Workshop," with *Patrick Harrop*, Prof. Architecture U. Manitoba, *H. Smoak*, *J.A. Drolet*, *E. Sinyor*, *J.S. Rousseau*, *T. Sutton*, *E. Thivierge*, *M. Sutherland*, *F. Lunn*, & Dedale Studio, Hexagram-Concordia, Montreal Canada, 5-12 November 2007.
- "(Dis)orientation Platform of Relation," movement exercise, with Tom Lamarre, Phillipa Rothfield, Housing the Body - Dressing the Environment Event, Société des arts technologiques (SAT) Montréal, August 2007.
- "Ouija Experiment on Collective Gesture in Responsive Media Spaces," Hexagram Blackbox Workshop, Concordia University, with Prof. Sha Xin Wei, Director; *Soo-yeon Cho*, Choreographer; *Dancers: Mike Croitoru, Kiani del Valle, Veronique Gaudreau, Rebecca Halls, Marie Laurier, Joannie Pharand, Olivia Foulke; Oxygen team: Jean-Sebastien Rousseau*, Calligraphic video, videography, visual effects, production, *Tim Sutton*, Gestural sound design and programming, production, *Emmanuel Thivierge*, State engine, camera tracking, production, *Filip Radonjic*, Live ink painting; *WYSIWYG Wearable Gestural Instruments team: Marguerite Bromley (XS Labs)*, Tapestry design and weaving, *Elliot Sinyor (IDMIL McGill)*, Tapestry mechatronics, *David Gauthier*, Tapestry mechatronics, *Freida Abtan*, Sound design & programming, *David Birnbaum (IDMIL McGill)*, Sound design & programming, *Doug van Nort (IDMIL McGill)*, Gestural motion feature analysis; *Logistics: Josee-Anne Drolet*, TML Project Coordinator, production, videography, editing; *Harry Smoak*, TML Research Coordinator, production support, research advisor; *Ma Zhiming*, Production; *Faculty Co-Advisors: Prof. Michael Montanaro*, Contemporary Dance, Ouija movement experiment design, *Prof. Marcelo Wanderley*, IDMIL, McGill University, WYSIWYG gestural control of sound synthesis; *Prof. Joey Berzowska*, XS Labs, Interactive textiles; June 21 - July 20, 2007.
- "SPECTROPIA," Toni Dove, Canada Research Chair Hosted Visiting Artist Lecture, Concordia University, 18 May 2007.
- "Creative research and the co-production of values, conversation with humanists, artists, and universities in Canada's economies of culture: Roundtable with Helga Wild, Niklas Damiris and Sha Xin Wei," Canada Research Chair Hosted Panel, Concordia University, 2 April 2007.
- Blackbox Residency, Concordia University, with *Harry Smoak* (Research Coordinator), and over 24 students and affiliate artists and researchers, 29 April - 20 May 2006.
- "Technologies of Performance," Research Roundtable, Dr. Chris Salter, Livia Daza-Paris, *Maroussia Lévesque*, Sha Xin Wei, Hexagram-Concordia, Montreal Canada, 19 May 2006.
- "Dream and Nightmare," Research Roundtable, Dr. Tore Nielsen (U. de Montréal), *Elena Frantova*, *Lisa Solomonova*, Hexagram-Concordia, Montreal Canada, 12 May 2006.
- "Wearable And Gestural Sound," Research Roundtable, Sha Xin Wei, *David Gauthier*, *Jason Levine*, Hexagram-Concordia, Montreal Canada, 10 May 2006.

**Organized Workshops
Chaired Panels**

- "Calligraphic Video," Research Roundtable, Sha Xin Wei, *Frieda Abtan, Yannick Assogba, Michael Fortin*, Hexagram-Concordia, Montreal Canada, 8 May 2006.
- "Soft Architecture," Research Roundtable, *Karmen Franinovic, Harry Smoak, Erik Conrad*, Hexagram-Concordia, Montreal Canada, 3 May 2006.
- "Die Audio Gruppe," Bernard Maubrey, Canada Research Chair Hosted Visiting Artist Lecture, 15 November 2005.
- "Thresholds of Performance III," Chaired Panel, SLSA, Chicago USA, November 11, 2005.
- "Valorization through art and technology : an opportunity to add value and rethink economic valuation ?" Dr. Niklas Damiris, lecture hosted by Canada Research Chair and Les Lundis Hexagram, Society for Arts and Technology (SAT) Montreal, 10 October 2005.
- "Threshold of Performance I and II," Chaired Panels, Performance Studies International, Brown, Providence USA, March 31 - April 3, 2005.
- "Mathematics, Writing and Poiesis," Chaired Panel, Society for Literature and Science, Pasadena USA, 2002.
- Special Faculty Respondent, Intimate Technologies, Banff New Media Institute, Banff Canada, 2002.
- "Mathematics, Writing and Poiesis," Chaired Panel, Society for Social Studies of Science, 2001.
- "Personal Narrative Spaces," Chaired Panel, ACM Multimedia, 1995.

**Peer-reviewed Conference /
Symposia Presentations****Peer-reviewed Conference/Symposia Presentations**

- "Ecosystemic Design," [Cybernetics and Design, American Cybernetics Society, Cybernetics and the 21st Century: Stories of Practice](#), 12-13 September 2020.
- "Textural articulation and rhythm as tools for non-anthropocentric approaches to individuation," Panel on Experimental Collective Experience, Body of Knowledge, Irvine, 8-10 December 2016.
- Workshop: A path from Irvine: Theatrical and anthropological explorations of self-knowledge, Caroline Gatt and Gey Pin Ang, 156. - SKYPE
- with Oana Suteu Khintirian, "Materialities of Memory in the Contemporary Transition between Print and Post-Print Culture," American Comparative Literature Association, Beyond Synaesthesia: Structures and Cultures of the Senses in Early Modern Europe (1400-1650), Harvard, 17-20 March 2016.
- "An Atelier-Laborator As a Transversal Machine," Panel: Prototype, organized by Lina Dib, Sophie Roosth, American Anthropological Association, Montreal, 16 November 2011.
- "Recherche-Création," Panel: Stengers' Cosmopolitics III -- Cosmopolitics as Compositional Practice, respondent: Isabelle Stengers, organized by Stephen Meyer, Society for Literature, Science, and the Arts (SLSA), Kitchener, 16 September 2011.
- "Substrate," Textures Conference SLSA-Europe, Riga, 15-20 June 2010.
- "Gesture in Responsive Media," Third International Conference on Music and Gesture, March 5 – 6, 2010, Centre for Interdisciplinary Research in Music Media and Technology, McGill University, Montreal, Canada. Co-organized with Marcelo

Peer-reviewed Conference /
Symposia Presentations

Wanderley, Jon Wild.

- "The Principle of Least Action (Leibniz, Whitehead, Alexander)," Society for Literature, Science, and the Arts (SLSA), Atlanta, November 5-8, 2009.
- "Morphogenesis: Whitehead's concrescence, Alexander's unfolding, and Serres' noise," Society for Literature, Science, and the Arts (SLSA), Atlanta, November 5-8, 2009.
- "Transversal Machines? The Art and Technologies of Performance," Society Social Studies Science (4S), Washington, D.C., October 28-31, 2009.
- "An Experiment in Autonomous Cultural Production," Society Social Studies Science (4S), Washington, D.C., October 28-31, 2009.
- "From Technologies of Representation to Technologies of Performance," Second International Conference on Critical Digital: Who Cares?, Harvard University Graduate School of Design, April 17-19, 2009, p. 129-135.
- "Petitot, Whitehead, the Problem of Novelty, and Computer Vision," Recoded: Landscapes and Politics of New Media, Kings College, Aberdeen UK, April 25-26, 2008.
- "What's at Stake?" First International Conference on Critical Digital: What Matters(s)?, Harvard University Graduate School of Design, April 18-19, 2008.
- "Laboratory Practice as Art Practice as Laboratory Practice? A Call for Case Studies on Creation/Research," Society for Social Studies of Science (4A), Montreal, October 11-12, 2007.
- "What's at Stake? Poetics of Performative Space," AI & Society Socio-ethics and Interactive Technologies: From Judgement to Calculation," Middlesex University UK, October 5-6, 2007.
- "Whitehead and Poetical Mathematics," Deleuze, Whitehead and the Transformations of Metaphysics Conference, Institute of Philosophy, K.U. Leuven, and the Royal Flemish Academy, Brussels, Belgium, 25 May 2005.
- "Why? And So What? Poetics of Performative Space," Space and Perception Symposium, RIXC, Riga, Latvia, 21 May 2005.
- "Performing Publicly in Responsive Space: Agora, Piazza, Festival and Street," European Association for the Social Studies of Technology, Vienna, 2000.
- "Enchantment and Topological Media," Deleuze Conference, University of California, Berkeley USA, 2-4 November 2006.
- "Whitehead's Poetical Mathematics," Distributed Whitehead Symposium, Duke University - Stanford University and University of Buffalo, 24 April 2006, <http://www.jhfc.duke.edu/jenkins/whitehead> .
- "Performing Ethico-aesthetics," Colloque international Gins et Arakawa Architecture and Philosophy, CREA, Universite de Paris 10, 1 October 2005.
- "Artful Gestures in Everyday Life," Surgery Performance Studies International, Brown, Providence, RI, 1 April 2005.
- "An Evening with Sponge," DEAF04, Rotterdam, 11 November 2004.
- "Scholarly Workspaces," UC Santa Barbara, USA, 1996.

Invited Lectures / Visiting Artist

Invited Lectures / Visiting Artist

- "Rhythm and Sensemaking," [Mind Body Space Indeterminacy Seminar](#), Stanzi Vaubel, 19 & 21 January 2021.
- ["Art, Science and Tech in Education,"](#) Roundtable with Alan Boldon, Ange Ansour, Meagan Fallone, Csaba Manyai, Geoff Mulgan, Gedimas and Nomedá Urbonas, 24 January 2021.
- [Transmeet 2020 - Leonardo](#) - Toward an Ecology of Courage, 19 November 2020, Jerusalem
- ["Indeterminacy and Ontogenesis,"](#) Keynote for *The Future of Indeterminacy: Datification, Memory, Bio-Politics*, University of Dundee 13-15 November 2020.
- "How to Human? Non-anthropocentric Design and the Art of Abductive Science?" Keynote for *Humans in the Loop - From End-Users to Citizens*, Architecture, Design & Media Technology, Aalborg University Copenhagen, 23 April 2020.
- "Ecologies of Practices Symposium: Prototyping Social Forms: Research-Creation Ateliers," College of Media, Communication and Information, University of Colorado Boulder, 18 September 2019.
- "USF Provost's Lecture: Matters of Value, Matters of Fact," University of San Francisco, 11 April 2019.
- "Transdisciplinarity to Alchemy: From Steam to Fusion, Synthesizing a New Science," Learning Lab, Dartington UK, 10 December 2018.
- "The Future of Art-Science," Leonardo 50th Anniversary Convening, San Francisco Art Institute, 2 November 2018.
- "Alter-Ecology / Alter-Economy," Keynote with Paul Shrivastava, Alliance for Arts in Research Universities, 1 November 2018, Athens Georgia.
- "Replacing Thought by Algorithm, Hesture by Mechanism, Organism by Golem," European Graduate School, Saas-Fee 19 August 2018.
- "What Escapes Computation in Interactive Performance?" panel convened by Teoma Naccarato and John MacCallum, Movement and Computing 2018, Genova, 29 June 2018.
- "Rhythm and the Embodied Sense of Space," Mobile Brain / Body Imaging (MoBI), Berlin, 11-14 July 2018.
- "Synthesis Center at ASU," PLASMA — Performances, Lectures, and Screenings in Media Art, Department of Media Study, University of Buffalo, 2 April 2018.
- "Synthesis Center," PLASMA Lecture Series, Department of Media Study, SUNY Buffalo, 2 April 2018. The
- "Rhythm and Textural Temporality, Duration as an Effect," Colloquium on Contemporary Scientific Thought, European Graduate School, 18 June 2017.
- "Resistance Is Fertile: Textural Gesture, Nuance and Rhythm," plenary talk, Gestures That Matter / Art in Society, The American University of Paris, 14–16 June 2017.
- "Temporal Notation," Semiomaths Seminar, University of Paris X Diderot, 15 May 2017.

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- "Condition of Place" Keynote, *The Idea of Place*, University of Alberta, 5-7 May 2017.
- "Alchemy," Anticipating Emergence: Intentional Future Making, Art, Technology and Emerging Communications, U Texas Dallas, 27 January 2017.
- "From screen to lens," Movimenta, Nice, 2 December 2016.
- The Synthesis Research Clusters: Art all the way down," Lab Culture 5: Speculative Environments, Society for Literature, Science and the Arts, Atlanta, 3-6 November 2016.
- "Constructing Problems," 2nd International Workshop in Design and Performance, American University of Paris, 10 July 2016.
- "Textural Care and Natality: the Stuff of Publics," SLSA-EU, Stockholm, 14-17 June 2015.
- "Mathematical Grammatology," Semiomaths Seminar, University of Paris X Diderot, 10 June 2016.
- "Rhythm and Textural Temporality: An Approach to Experience without a Subject and Duration as an Effect," Rhythm as Pattern and Variation: Political, Social and Artistic Inflections, Goldsmiths London, 23 April 2016.
- "Empathy & Care: The Stuff of Politics and the Politics of Stuff," DC Art Science Evening Rendezvous (DASER), Keck Center, Washington DC, 19 May 2016. <http://www.cpnas.org/events/daser-051916.html> .
- "Desert Condition Noise Pattern," Desert in the Human Imagination, Desert Cities Symposium, Institute for Humanities Research, ASU, 20 November 2016.
- "Before and after AI," Reclaim AI – Back-To-The-Humans, Brick Lane, LBI Digitas, London, 10 November 2016. <http://www.cybersalon.org/reclaim-ai/>
- "A multi-scale rhythmalytic approach to biosocial complex systems," Chair for Computer Aided Architecture and Design, ETH Zurich, 23 June 2015.
- "Textural Care and the Stuff of Publics," *Public Life - Towards a Spatial Politics of Care: Bodies. Place. Matter*, Interdisciplinary Centre for Urban Culture and Public Space, Vienna University of Technology, Austria, 17-18 April 2015.
- "Experimental ontogenesis and individuation," presenter and respondent, *New Media New Publics*, Wenner-Gren Symposium, Sintra Portugal, 13-19 March 2015.
- "Alan Lightman," Institute of Humanities Research, Arizona State University, 3 February 2015.
- "Quicken Sounding Paper," Intel Design School Network Annual Summit, California College of Arts, San Francisco, November 3-4, 2014, with *Chris Wood*.
- "Intel-CIID Fellowship *Q Is for Quicken* Final Studio," Copenhagen Institute of Interaction Design, 15 August 2014.
- "Transversal Atelier," Medialogy and Sound Music Computing programs, Aarlborg University, August 11, 2014.
- "Play vs. Game," Keynote lecture, INTETAIN 2014, Columbia College Chicago, July 11, 2014.
- "Ecology of Practices Roundtable," with Adrian Freed, John MacCallum (Center for

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- New Music, Art and Technology UC Berkeley), and Michael Epperson (Center for Philosophy and the Natural Sciences, CSUS), Berkeley, June 24, 2014.
- "An Introduction to Point-set Topology, Differential Geometry and Fiber Bundles," and "A Nonanthropocentric Approach to Apperception via Petitot and Topological Dynamics," Metalithicum V, Library Werner Oechslin Einsiedeln, 22-25 May 2014.
- "A Nonanthropocentric Approach to Apperception via Petitot and Topological Dynamics," Quantity / Quality Symposium, UC Davis, 5-6 April 2014.
- "Media arts and Sciences," Herberger Institute of Art, Arizona State University, 14 February 2013.
- "Ryoji Ikeda," DHC Gallery & PHI Centre, Montreal, 17 October 2012.
- "Recherche-Création: Play in Common Space," Logan Center for the Arts, University of Chicago, 12 October 2012.
- "Topology, Phenomenology and Spatial Audio," UC Berkeley Center for New Music and Audio Technologies (CNMAT), 13 Sep 2012.
- "Play and Morphogenesis," Keynote lecture at SLSA Europe and Supersonix Symposium, London, 20 June 2012.
- "Topological Media," Syncretic Transcodings, Hexagram UQaM, 5 May 2012.
- Respondent to Celia Lury, "Inventive Methods: Moving Knowledge," Technoscience Salon, University of Toronto and York University, 9 March 2012.
- "Vaster than empires and more slow: Gesture and Movement in Vegetal Time," Technoscience Salon, University of Toronto and York University, December 2, 2011.
- "Alternate|Augmented Reality? Constraint-based live events in common space," Greater Than Games, John Hope Franklin Center for Interdisciplinary and International Studies, Duke University, 31 October 2011.
- "Calligraphic, Gestural Dense Media," High Performance Computing, Montreal 17 June 2011.
- "Topology, Morphogenesis and Cultural Dynamics", Paris 8, 2 June 2011.
- "Textural and Gestural Media", Digital Hub, University of Aberdeen, 1 June 2011.
- "Morphogenesis," Literature and Mathematics Symposium, Centre for Modern Thought, Aberdeen, 12 June 2010.
- "Topological Media," Digital Media in Society Panel, Canada Research Chairs, with SSHRC President Chad Hartfield, Congress of the Humanities and Social Sciences, Concordia University, 2 June 2010.
- "Topological Media," Tele-Immersion Lab, UC Berkeley, 5 May 2010.
- "Effects: Poiesis and Enchantment," Department of Rhetoric, UC Berkeley, 4 May 2010.
- "Gesture in Responsive Media," Human-Computer Interaction, Computer Science Department, Stanford University, 10 March 2010.
- "Topological Media," New Media Institute, UC Berkeley, 25 February 2010.
- "Transversal Research," Science and Technology Studies Program, UC Davis, 22 February

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2010.

- "Enchantment and Public Space", SIAT, Simon Fraser University, 9 January 2008.
- "Topology of Being," Heidegger and Space, Stanford University, 2 June 2007.
- "Art Research: Sponge & the Topological Media Lab," 9 Evenings Reconsidered: Art, Theater and Engineering 1966, Leonard & Bina Ellen Art Gallery, Concordia University, 23 March 2007.
- "A Poetics of Responsive Space/ Technologies of Performance," SMARTlab Seminar, University of East London, UK, 12 July 2006.
- "Poetics of Performative Space," Who's In Control? Symposium, Harvestworks/Eyeball/ Three-Legged Dog, New York, 25 February 2006.
- "Art Research in Performative Spaces," Hexagram Mondays, SAT, Montreal, 13 February 2006.
- "Numberless Shape," Society for Literature and Science, Pasadena, October 2002. "An Experiment in the Phenomenology of Performance," Literature/Science/Images Workshop, History of Science, Harvard University, March 2, 2005.
- "The Topology of Gesture," Corpo-Topologies: Space and Materiality Panel, Society for Literature and Science, Paris, 2004.
- "Topological Media Lab: Art Research on Gestural and Calligraphic Media," Inside/ Outside: Responsive Environments and Ubiquitous Presence, Banff New Media Institute, August 2004.
- "Gesture and Agency in the Field of Responsive Media," C a l - (I T) 2 Irvine Media Arts Hybrid Speaker Series, May 2004.
- "Shaping Art Practice as a Mode of Research: TGarden and Responsive Media," Stanford Mellon Workshop: Critical Studies in New Media, May 2004.
- "Topological and Responsive Media," Digital Media Visiting Artist Lecture Series, Rhode Island School of Design, Providence RI, March 2004.
- "Le Geste entre Science et Art," Conférence du TeslabTEC, Université du Québec à Montréal Canada, January 2004.
- "Diagrammatological Surgery on Whitehead's Time in Concept of Nature," Society for Literature and Science, Austin, October 2003.
- "Paleontology of Knowledge," Society for the Social Studies of Science, Atlanta October 2003.
- "Does Felt Dream of Electric Sheep?" Carbon versus Silicon: Thinking Small/Thinking Fast Nanotechnology Conference, Banff Canada, August 2003.
- "Wearables for Responsive Environments," Future Physical Respond Symposium, Cambridge UK, April 2003.
- "Topological Media," Jan Van Eyck Institute, Maastricht, April 2003.
- "Dynamics on Simplicial Complexes for Media Choreography," Sony Computer Science Laboratory, Paris France, March 2003.
- "Mote- and Fabric-based Wearable Instruments," STEIM, Amsterdam March 2003.

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- "Topological Media and Softwear for Responsive Spaces," U. Quebec at Montreal Canada, March 2003.
- "Resistance Is Fertile," Program in the Study of Imagination, Northwestern University, Chicago USA, February 2003.
- "Wearable Sound," Future Physical WearMe Symposium, UK, December 2002.
- "Performance Technologies," EDA Lecture, Design | Media Arts, UCLA, October 2002.
- "Hubbub Salon," with Anne-Maria Korpi and *James Hsu*, Transcinemam, 3feetofftheground, San Francisco USA, July 2001.
- "Differential Geometrical Writing as Poietic Technology," Society for Social Studies of Science, Boston, 2001.
- "Geometric Writing As Performance," Society for Literature and Science, 2000.
- "Geometric Measure Theory As Monster Mash," Society for Literature and Science, and Society for Social Studies of Science, 1999.
- "Writing and Performance," Media Arts Research Studies, GMD St. Augustin Germany, 1999.
- "Building A Better Blackboard," University of California Berkeley Graphical User Interface Research seminar, Berkeley USA, 1999.
- "Geometer's Workbench," Stanford Computer Science Department Information Mural Group, Stanford USA, 1998.
- "Technologies of Writing," University of Trondheim, Norway, 1997.
- "Mathematical Inquiry," San Francisco Exploratorium, Institute for Inquiry, San Francisco USA, 1996.
- "Networked Collaborative Learning Environments," Stanford Project-Based Learning Symposium, USA 1995.
- "MediaWeaver, A Framework for Composing Distributed Media," Digital Libraries seminar, Stanford Computer Science Department, USA, 1995.
- "SiliconBase." Workshop on Digital Libraries in Science and Technology Studies, New Orleans USA, 1994.
- "Interactive Media Spaces," San Francisco Museum of Modern Art, USA, 1994.
- "Collaborative Multimedia." Beyond the Obvious, ACM Multimedia Panel, USA, 1994.
- "Distributed Multimedia." People Computers and Design seminar, Stanford Computer Science Department, USA, 1994.
- Funding**
- "Navigating Uncertainty and Crisis" Alternative Reality Simulation for Istanbul Innovation Day, United Nations Development Program, 2021.
- "Sea Change 2020 Horizon Scan" United Nations Development Program, with Sander van der Leeuw, Julianna Gwyszcz, 2020.

- Funding** “Computational Imaging and Lighting,” Herberger-Fulton Research Seed Grant, with Suren Jayasuriya 2018.
- Canada Council for the Arts, Residency Serra Vegetal Life, 2016-2017.
- Carnegie Humanities Investment Fund, Arizona State University, OKED, 2014-2015, Synthesis Center.
- Intel Fellowship, Copenhagen Institute of Interaction Design, 2013-2014.
- Presidential Strategic Initiative Fund, Arizona State University, 2013-2020, Digital Culture
- Presidential Strategic Initiative Fund, Arizona State University, 2013-2020, Synthesis Center
- Mellon Fellowship for Arts Practice and Scholarship at the Gray Center for Arts and Inquiry, with Prof. Patrick Jagoda, English and Cinema & Media Studies, University of Chicago, 2012-2013.
- Le Fonds québécois de la recherche sur la société et la culture, Projets Novateurs Le rêve d’Einstein 1: installations qui modifient la temporalité, 2012-2013.
- Sustainability Action Fund, Concordia University, 2011-2012.
- Strategic Research Partnerships, Office of the Vice President, Research and Graduate Studies, and Faculty of Fine Arts, Concordia University, 2011-2012.
- Book Completion Grant, ARRE, Office of the Vice President, Research and Graduate Studies, and Faculty of Fine Arts, Concordia University, 2011-2012.
- National Centre of Excellence, GRAND: Graphics, Animation and New Media, Collaborating Network Investigator 2010-2011.
- Canada Research Chair New Media, 2010-2015.
- Le Fonds québécois de la recherche sur la société et la culture, Architectures of Enchantment, Temporal Textures in the Built Environment, 2010-2012.
- National Centre of Excellence, GRAND: Graphics, Animation and New Media, Play and Performance, 2010.
- National Centre of Excellence, GRAND: Graphics, Animation and New Media, Virtual Presence, 2010.
- Concordia VPRGS and Faculty of Fine Arts Facilities Upgrade Grant, Core Computer System for CRC Topological Media Lab, 2010-2011.
- Faculty of Fine Arts Travel Grant, Textures SLSA-Europe Riga, 2010
- Faculty of Fine Arts Travel Grant, Calligraphic Video, ACM Multimedia Shanghai 2009.
- Experimental Phenomenology, with David Morris (Department of Philosophy), Concordia VPRGS Seed Grant, Faculty of Fine Arts, and Faculty of Arts and Sciences, 2009.
- Frankenstein’s Ghosts, SSHRC Research Creation grant, co-PI, 2007-2009.
- Pneuma Installation at Champ Libre Montreal and eArts Shanghai, Concordia VPRGS Aid to Research Related Events, Publications, Exhibition and Dissemination grant, 2008.
- Concordia Faculty of Fine Arts, Research Fund, Topological Media Lab, 2008.

- Funding**
- Hexagram, Ozone Media Choreography, 2008.
 - CIAM Fonds Quebecois De La Recherche Sur La Societe et la Culture, Travel Support for AI & Society, and Experimental Pratices in Art, Science, and Philosophy, 2007.
 - Faculty of Engineering Computer Science, SRT Masters Research Stipend, M. Fortin, E. Frantova, 2007.
 - Faculty of Fine Arts, CO2 / Ouija movement experiment initiation grant, 2007.
 - Hexagram Financial Assistance Fund, Dance Moves initiation grant, 2007.
 - Hexagram Financial Assistance Fund, OXYGEN Media Choreography initiation grant, 2007.
 - Le Fonds québécois de la recherche sur la nature et les technologies, Unités agencables: Reseau d'Environnements Immersifs pour Collaboration à Distance, team grant with Jeremy Cooperstock, McGill University, 2006-2009.
 - CIAM Fonds Quebecois De La Recherche Sur La Societe et la Culture, Soft Architecture Workshop, 2006.
 - Fonds québécois de recherche sur la société et la culture, Programme d'appui à la recherche-crédation, IL Y A: Membranes Video Calligraphiques, 2006-2009.
 - Hexagram, WYSIWYG Wearable and Gestural Sound, 2005, with M. Wanderley, McGill.
 - CIAM Fonds Quebecois De La Recherche Sur La Societe et la Culture, Summer Workshop in Topological Media, 2005.
 - Canada Foundation for Innovation Infrastructure Grant, 2005-2008.
 - Hexagram, Excitable Sites, research affiliate with J. Berzowksa, B. Layne, C. Salter.
 - Daniel Langlois Foundation for Art, Science and Technology, Independent Artist, Softwear Instruments, 2003.
 - Rockefeller Foundation, Boundary Crossings: New Modes of Cultural Production, 2003, sponge / Code Zebra.
 - LEF Foundation, Sauna, 2002, sponge.
 - Creative Work Fund, Sauna, 2002, sponge.
 - Daniel Langlois Foundation for Art, Science and Technology, sponge TGarden, 2001.
 - GVU Seed Grant, Wearables for Performance, 2001.

Grant Submissions ***Grant Submissions (selected)***

- (selected)** Sea Change: Navigation Water Dilemmas, with Paul Shrivastava (Future Earth), MacArthur 100&Change, 2016, \$100,000,000.
- VEC: Medium: Live Experiential Computing Environment with Dense Sensing and Dense Media, NSF/Intel Partnership on Visual and Experiential Computing, 2015.

Teaching Activities *Teaching Activities***Courses Taught**

- 2021 AME 531: [The Arts of Time](#)
Synthesis Prototyping Social Forms Process Germ Bank
- 2020 EGS [Alter-Eco: Measure and Value](#)
AME 530 Experiment and Experience
[Synthesis Alter-Eco](#): Emergence, Ontogenesis, Individuation; Enabling and
Disabling Measures; Infrastructures Studio
Synthesis Prototyping Social Forms Seminar, Building21 McGill
AME 531 and 494 Narrative As Event
AME 494 and 499, Media Culture in Montreal and Responsive Environments
- 2019 AME 530 Proseminar: Experiment and Experience
EGS Alter-Eco, Malta, October
- 2018 AME 530 Proseminar: Experiment and Experience
AME 531 Emergence, Ontogenesis, Individuation
AME 494 Responsive Environments, with L Hayes, T Ingalls, J Stein, G L Johnson
EGS Emergence, Ontogenesis, Individuation
EGS Rhythm
- 2017 EGS Beyond Computation: Poiesis and Enchantment in Topological Matter
- 2017 AME 591 Ontogenesis
AME 531, Experiential Media Methodology and Theory II: The Biosocial After the
Digital
- 2016 AME 530, Experiential Media Methodology and Theory I
- 2015 AME 530, Experiential Media Methodology and Theory I
- 2015 AME 531, Experiential Media Methodology and Theory II
- 2014 AME 530, Experiential Media Methodology and Theory I
- 2014 AME/ENG 591, Critical Studies of Media Arts and Sciences
- 2012 Visiting Associate Professor, University of Chicago, Department of English
Fall 2012, Transmedia Games, with Prof. Patrick Jagoda
- 2005-present. Associate Professor, Fine Arts and Computer Science, Concordia University:
Fall 2013, CART 370 Realtime Video
Winter 2013, CART 414 Matter and Media
Fall 2012, INDI 633 Seminar: Phenomenology, Temporality, Architecture
Fall 2012, INDI 639 Seminar: Practicum Responsive Environments

Teaching

Fall 2012, TML Seminar: Maths for Media Arts and Philosophy
 Fall 2012, CART 411 Project Studio: Another World Is Possible?
 Summer 2012, TML Seminar: Maths for Media Arts and Philosophy
 Winter 2012, CART 412 Project Studio: Alchemy, Time and Temporality
 Winter 2012, TML Seminar: Temporal Textures, Movement + Media
 Fall 2011 - Spring 2012 INDI 698, Master's Directed Research Course: Practicum
 Fall 2011 INDI 693, Critical Studies of Media Arts and Sciences
 Fall 2011 - Spring 2012 TML Seminar: Alchemy and Capitalist Sorcery
 Fall 2011 - Spring 2012 TML Seminar: Maths for Media Arts and Philosophy
 Fall 2011, CART 370: Realtime Video, with *Freida Abtan*
 Fall 2011, TML Maths Seminar: Introduction to Group Theory
 Fall 2010 - Winter 2011 TML Experiment+Seminar: Memory and Place, Identity, with David Morris
 Winter 2011, TML Seminar: Introduction to Differential Equations, Differential Geometry, Measure Theory
 Fall 2010, TML Seminar: Spinoza's Ethics and non-anthropocentric ecology
 Fall 2010, TML Maths Seminar: Introduction to Linear Algebra, Topology, Differential Equations
 Fall 2010, CART 414 / SIP 825, Matter and Media
 Winter 2009, HUMA 888, Subjectification, Process, and Performance, Critical Studies of Media Arts and Sciences, Doctoral Seminar in Interdisciplinary Studies
 Winter 2009, CART 454, Enchantment, Matter, and Media
 Fall 2008, CART 600, Architecture of Responsive Spaces
 Winter 2008, CART 454, Enchantment, Matter, and Media
 Fall 2007, HUM 888, Subjectification, Process, and Performance
 Fall 2007, COMP 498A / CART 498D, Realtime Computational Video
 Fall 2006, Winter 2007, SIP 827, Critical Studies in Media Arts and Sciences
 Winter 2007, CART 454, Enchantment, Matter, and Media
 Fall 2006, COMP 471, Computer Graphics: Real-time Video
 COMP 490, Computer Science Project
 DART 471, Professional Interenship
 Winter 2006, CART 498D, Topics in Multiemdia Theory
 Winter 2006, ASEM 652 MFA Seminar Alchemy and Topological Media
 COMP 490, Computer Science Project
 Fall 2005, COMP 691X, Alchemy and Real-time Media: Calligraphic Video, Ph.D.

Teaching

Seminar

Fall 2005, CART 498C Real-time Video

Summer 2005, CIAM Seminar and TML Workshop (40 sessions, 8 weeks)

Winter 2005, DFAR 454: Topics in Multimedia Theory

2001 -2004. Assistant Professor, School of Literature, Communication and Culture, Information Design Technology, Georgia Institute of Technology:

Summer 2004, TML Summer Seminar Workshop: Topological Media Lab

Fall 2003, LCC 8803 A Tangible and Responsive Media

Fall 2003, LCC 8910 Independent Study

Fall 2003, LCC 2100 B Introduction to STAC: Knowledge How and Knowledge That

Fall 2003, LCC 6650 H Project Studio

Summer 2003, TML Summer Seminar Workshop: Topological Media Lab

Spring 2003, LCC 6321 A Architecture of Responsive Spaces

Spring 2003, LCC 3314 L Technologies of Representation: Speech, Writing and Language

Spring 2002, LCC 3833 F Special Topics in Issues of STAC: Living Pattern

Spring 2002, LCC 6650 H Project Studio

Fall 2002, LCC 6310 A Computer As an Expressive Medium

Fall 2001, LCC 3314 D Technologies of Representation: Speech and Writing

Fall 2001, LCC 6321 A Architecture of Responsive Spaces

Fall 2001, LCC 6650 H Project Studio

Spring 2001, LCC 6113 A Multimedia Design: Technologies of Performance

Spring 2001, LCC 3833 J Special Topics in STAC: Virtuality and Habitation

Spring 2001, LCC 6650 H Project Studio

1997-1999. Visiting Scholar and instructor, Stanford University: History of Science Sophomore Seminars on Virtuality, with Tim Lenoir

1994-1997. Coordinator, Stanford University: Interaction and Media Group (IMG), Humanities Center faculty/student workshop.

1991, 1992. Teaching Assistant, Stanford University: "Adaptive Pattern Recognition and Neural Networks."

Students Supervised *Students Supervised****Independent Study, Undergraduate***

Ben Nandin, Media Choreography: Sound, ASU, 2016.

Josh Stark, Weather Simulations for Immersive Environments, ASU, 2016.

Students Supervised

Evan Montpellier, Analog video, Concordia IMCA, 2012.
 David Silveira, Kinetic sculpture and shadow, Concordia CART, 2012.
 Julia Wolfe, Internet, journalism, and public space, Concordia CART, 2012.
 Jason Levine, Speech feature extraction and extended voice, Concordia CS, 2006.
 Graham Coleman, Speech-driven animation, Georgia Tech, 2002.
 Stephen Ingram, Speech + dynamic typography, Georgia Tech, 2001-2002.
 Vinny Fiano, Speech-driven animation, Georgia Tech, 2001-2002.

Independent Study, Masters Level

Tyr Umbach, Mathematics seminar, 2010 - present.
 Sean Braithwaite, Mathematics seminar, 2010 - present.
 Jesse White, Augmented reality, Mathematics seminar, 2011- present.

Independent Study, Doctoral

Magdalena Olszanowski, Alchemy seminar, Communications, Concordia 2011-2012.
 Sarah Choukah, Alchemy seminar, U. de Montreal, 2011-2012.
 Delphine Nain, Vision methods in medical imaging, Ph.D., College of Computing, Georgia Institute of Technology, 2002 - 2006.
 Giovanni Iachello, Security, policy, and ubiquitous computing, Ph.D. College of Computing, Georgia Institute of Technology, 2002 - 2004.
 David Nguyen, Ph.D. College of Computing, Georgia Institute of Technology, 2002-2003.
 James Wang, Semantics-Sensitive Integrated Matching for Picture Libraries, Ph.D. Computer Science, Stanford University, 1994-1997.

Visiting Scholars and Artists

Elysha Poirier, Video, painting, graphic design, WunderKammer, Ontario Quebec Artist, 2012.
 Thomas Jellis, Ecologies of practices, Ph.D., Geography, Oxford University, 2009.
 Lina Dib, Technologies of memory; installation arts, Ph.D., Anthropology, Rice University, 2008-2011.

End of Term Group Evaluation

Graduate Certificate Program, Computation Arts, 2005, 2006
 Ayesha Hameed, Outer Space, York University and Concordia University, CART Graduate Certificate Program, 2006.

Students Supervised***Masters Thesis Advising, Principal Supervisor***

- Andrew Robinson, Implicit Games, 2018-2019.
- Garrett Johnson, "Performing Embodiment: The Electroencephalographic Music of David Rosenboom," MA Music (Music History and Literature) ASU, 2015.
- Varsha Iyengar, Body-painting, MS Computer Science / AME ASU, 2014-2016
- Prashanth Sudarshan Seshasayee, Animating Silhouettes, MS Electrical and Computer Engineering / AME ASU, 2014-2016
- Nikolaos Chandolias, INDI Concordia, Speech Processing and Performance, 2012-2014.
- Patricia Duquette, INDI Concordia, Artaud, 2017.
- Omar Faleh, INDI Concordia, Interactive Architecture, 2012 - 2017.
- JoDee Allen, INDI Concordia, HipHop, Street Dance and Responsive Media, 2011-2013present.
- Michael Fortin, SIP Computer Science Concordia, Computational Fluid Dynamics, Parallel Machine Architectures and Realtime Video, 2008 - 2010.
- Elena Frantova, SIP Computer Science, Sensing presence (with Dream and Nightmare Laboratory, Hopital Sacre-Coeur, U. de Montreal), 2006 - present.
- Kevin Quenesson, Conscious=Camera, Responsive Installations: Towards A Narrative Of The Self?, Georgia Tech IDT, 2006.
- Maria Cordell, The Tapestry Project: Exploring the Visual Rhetoric of News, Georgia Tech IDT, 2005.
- Jill Fantauzza, Responsive Garments, Georgia Tech IDT, 2004.
- Jehan Samir Moghazy, HCI evaluation of play spaces, Georgia Tech IDT, 2001-2002.
- Yoichiro Serita, wearables, physical computing, realtime media, Georgia Tech HCI, 2002-2004
- Erik Conrad, Aether interactive installation, Georgia Tech IDT, 2001-2002.
- Junko Tsumuji, StirVision motion capture re-projection, Georgia Tech IDT, 2001-2002.
- Alex Cook, Tryptich interactive script, Georgia Tech IDT, 2001-2002.
- James Hsu, Tryptich video installation, Georgia Tech IDT, 2001-2002.
- Joel McGinnis, morphing music, Georgia Tech IDT, 2001.

Masters Thesis Advising, Co-Supervisor

- Felix Rebolledo, "Becoming One With the Screen," co-supervised with Erin Manning, INDI 2013.
- Steven Dow, Georgia Tech HCI ubiquitous computing, 2001-2003.
- Chaim Gingold, "Miniature Gardens & Magic Crayons: Games, Spaces, & Worlds," co-supervised with Michael Mateas, Janet Murray, Will Wright, IDT 2003.
- Kulavee Tejavaniya, TCostume experimental garment design, Georgia Tech IDT, 2002.

Students Supervised

Yvonne Caravia, active materials and body-based design, Georgia Tech IDT, 2001-2002.

MFA

Zohar Kfir, Open Media, 2009 - 2012.

Laura Emelianoff, Fiber arts, 2008 - 2012.

Flower Lunn, Studio and fiber arts, 2007 - 2011.

MFA Co-Supervisor

Chloe Bertrand, "Moirae", Fine Arts, Concordia University, 2007, co-advised.

Alexander Wilson, Social Reproduction Machine, Open Media, Fine Arts, Concordia University, 2006, co-advised.

Geneviève Chevalier, "Par vents et marées, par monts et rivières, par villes et villages." 2005, co-advised.

Nadine Asswad, Movement, Affect, and Cinema, Concordia University Film Department, 2005-2006, co-advised.

Troy Rhoades, Nomadic Cinema, Concordia University Film Department, 2005-2006, co-advised.

Doctoral Students**Doctoral Thesis Advising -- Principal Supervisor**

Shomit Barua, Media Arts and Sciences, AME ASU. 2019 - present.

Lyu Yanjun, Media Arts and Sciences, AME ASU. 2018 - present.

Emiddio Vasquez, Media Arts and Sciences, AME ASU. 2015 - present.

Garrett Johnson, Media Arts and Sciences, AME ASU. 2015 - present.

Adrian Freed, Special Individualized Program: Fine Arts. 2010 - 2016.

Patrick Harrop, Architecture and computational media, Humanities Special Program, Concordia University, 2007 - present.

So-Young Park, Art and philosophy, Humanities Special Program, Concordia University, 2006 - present.

Erik Conrad, Haptic, transmuted, and peripheral awareness, Special Individualized Program: Fine Arts and Computer Science, Concordia University, 2005 - present.

Harry Smoak, Special Individualized Program: Fine Arts and Computer Science, Concordia University, 2008 - 2015.

Valerie Lamontagne, Relational performance, Special Individualized Program: Fine Arts and Computer Science, Concordia University, 2005 - 2010.

Karmen Franinovic, Responsive architecture and public space, Communications, Concordia University, 2005 - 2008.

Students Supervised***Doctoral Thesis Advising -- Co-Supervisor***

Federico Simone Ruberto, *Immanence and Contingency in Meillassoux, Deleuze and Laruelle. A Philosophical Inquiry on Signs, Models and Diagrams at the Edge of Natural and Formal Language*, Philosophy, Art & Critical Thought, European Graduate School, 2019.

Leslie Smith, Media Arts and Sciences, ASU, 2017-2019.

Brenda McCaffrey, Active materials, Media Arts and Sciences, ASU, 2015-2018.

Josh Gigantino, Industrial design, Human-factors, Fab Lab DIY culture, Media Arts and Sciences, ASU, 2015-.

Byron Lahey, A Maker's Mechanological Paradigm Seeing Experiential Media Systems as Structurally Determined, Media Arts and Sciences, ASU, 2015.

Michael Krzyzaniak, Robotic ensembles, Media Arts and Sciences, ASU, 2015.

Tzu En Ngiao, Composition and responsive media, SIP. 2012-2014.

Adam Sertima, Play and game, Special Individualized Program, Concordia, 2012-2016.

Mayra Morales, Dance and performance, Humanities Special Program, Concordia, 2012-.

Jennifer Spiegel, Theatricality and ecology, PhD, Goldsmiths College, London, 2008-2011.

Miao Song, Computer graphics and cinema, Special Individualized Program. 2009 - 2011.

Troy Rhoades, Humanities Special Program: Fine Arts, Concordia University, 2006 - 2011.

Yon Visell, Behavioral systems and sensing intentionality, Center for Intelligent Machines, Computer Science, McGill University, 2005 - 2007.

Magda Wesolkowska, Faculty of the Built Environment and Planning, Université de Montréal, 2004 - 2006.

Doctoral Thesis Advising -- Member of Supervisory Committee

Desiree Foerster, Atmospheres, Department of Philosophy, University of Potsdam, 2018-.

Jennifer Willet, (RE)embodying Biotechnology: towards the democratization of biotech through embodied practices, Humanities Ph.D. Concordia University, 2006.

Thesis / Project Reading -- Doctoral

Charles Gagnon, Touch and knowledge in sculpture, Special Individualized Program PhD, 2006 - 2008.

External PhD Examiner

Desiree Foerster, *Aesthetic Experience of Metabolic Processes*, Department of Philosophy, University of Potsdam, 2020.

Natalie Smolenski, *Economies of Madness: Self- and World-Construction as a Function of the Circulation of Value*, Philosophy, Art & Critical Thought, European Graduate School, 2019.

Doctoral Students Tanner Bonin, *On the Perception of Musical Form and the Shouga of Traditional Japanese Music*, Department of Music, McGill University, 2019.

Vangelis Lymphouridis, *Design Strategies for Whole Body Interactive Performance Systems*, College of Humanities and Social Science. Edinburgh College of Art, The University of Edinburgh, 2012.

Anne Nigten, SMARTlab, University of the Arts London, 2006.

Aleksandra Dulic, *Fields of Interaction: From Shadow Play Theatre to Media Performance*, Simon Fraser University, 2006.

Post-doctoral Students *Post-doc Supervisor*

Dulmini Perera, "Everyday Monsterly lives: Framework for a possible concrete project," Habilitation, Fakultät Architektur und Urbanistik, Professur Theorie und Geschichte der modernen Architektur, Bauhaus-Universität Weimar, 2020 -

Desiree Foerster, *Atmosphere and Metabolism*, University of Chicago, 2020 -

Brandon Mechtley, *Computational Complex Systems, Synthesis*, ASU, 2014-2016.

Doug van Nort, *Music and Technology Banting Fellow*, Topological Media Lab, 2013-2014.

Jennifer B. Spiegel, *Critical studies of performance, theatricality and ecological activism*, 2011-2013.

Ma Zhiming, *Visting Scientist*, from Xinjiang Normal University, sponsored by China Scholarship Council of the PRC, September 2006 - August 2007.

Academic Service *Academic Service*

Directorships

Director, School of Arts, Media and Engineering, Arizona State University, 2014 - 2019

Director, Synthesis Center, 2014 - present, <http://synthesiscenter.net>

Director, Topological Media Lab, 2001 - 2014, <http://topologicalmedia.net>

Director, Hexagram Interactive Textiles and Wearable Computing Axis, 2005-2007.

Departmental Service

AME Academic Site Review, 2018, School faculty and staff + External Reviewers Tim Lenoir, Ben Knapp, Rushil Anuiridh.

Department Promotion and Tenure Committee, 2020 -

Lectures Sponsored by CRC

Nikas Damiris, Sustainability

Helga Wild, Deep Ethnography

CART Liaison with CDA

CART Curriculum Committee

Computer Science Department Liaison with Fine Arts

Academic Service**Faculty Service**

Canada Research Chair Faculty Search Committee, Faculty of Fine Arts, Concordia University, 2005.

Film Animation Faculty Search Committee, Faculty of Fine Arts, Concordia University, 2009.

Visiting Artist Lectures Sponsored by CRC

Benoit Maubrey, Die Audio Gruppe / Audio Ballerinas

Tirtza Even, installations and experimental documentary

Toni Dove, Spectropia, interactive film, independent artist, New York

Nadine Boykovic, Cambridge University Dept, of French, Film Studies 2011

Mili Tharakan, active textiles 2011

University Service

Concordia University Committee for 11th Technology Summit and Technology Platform 2005 in New Delhi, India, 2005.

Concordia University Committee for National Academy of Chinese Theatre Summer Institute, 2005-2006.

University Research Committee, 2010-

Visiting Scholar Lectures Sponsored by CRC

Prof. Brian Rotman, Ohio State University, 2010

Dr. Niklas Damiris, Stanford Humanities Center, 2010, 2011

Dr. Karamjit Gill, Editor *AI & Society*, 2013

Concordia University Faculty Tribunal Pool, 2012-

Concordia University, Center for Teaching and Learning, 2012-

Concordia University, IT Needs Advisory Committee, 2013-

External Committees, Juries, Editorial Boards**Editorial Boards**

Associate Editor, *AI & Society*, Cambridge and London, UK, 2005 - present

Editorial Board, *International Journal of Creative Interfaces and Computer Graphics* (IJCICG), 2009 - present

Editorial Board, *FibreCulture: Internet Theory + Criticism + Research*, 2008 - present.

Editorial Board, *Experimental Practices* Book Series, Rodopi Press, 2006 - present.

Editorial Board, *Architectural Intelligences*, Book Series, Rodopi Press, 2014 - present.

Program Reviewer

Program Reviewer: Interactive Arts and Media, Columbia College Chicago, April 22-24, 2015.

Academic Service

Program Reviewer: Digital Futures Initiative, OCAD University, Toronto, April 27-28, 2010.

Peer Review Platform for Collaborative Scholarship, Alliance for the Arts in Research Universities, 2015 - present.

Program Review, Interactive Arts and Media, Columbia College Chicago, May 2015.

Advisory Boards, Scholarly Societies

Leonardo Governing Board, 2019-

Alliance for Arts in Research Universities (A2RU) Executive Committee, 2016-2019

NEH, The Humanities Laboratory: Discussions of New Campus Models, 11-12 July 2016

Banff New Media Institute Advisory Board, 2003-2004.

Society for Social Studies of Science, 2002 +

Association of Computing Machinery, 2000 +

Ground Zero, Bay Area Advisory Committee 2000 - 2001.

Society for Literature and Science, 1999 - present

Computer Professionals for Social Responsibility, 1999 +

Wolfram Research Mathematics Research Advisory Board, 1991-1993.

American Mathematics Society, 1980 +

National / International Strategy

Alliance for the Arts in Research Universities Town Hall, Next Steps for Higher Education and Workforce Development, National Academy of Sciences, Washington DC, 24 May 2018, <https://www.a2ru.org/town-hall-meetings>

Re-envisioning Professional Education Convening, Columbia University Center for Public Research and Leadership, Columbia Law School, New York, 11-12 June 2018

Conference Organizing

Digital Intelligence Program Committee 2016-2017

Gesture and Music, McGill, 2010

Reviews *Reviewing Work*

Movement and Computing, 2016-

Journal of New Music Research, 2016

SSHRC (Canada); NEH, NSF (USA); JISC (United Kingdom), Digging into Data Challenge Conference, Washington DC, 9-11 June 2011

AI & Society, 4 articles, 2008-present

Reviews Duke University Press, 1 book
 MIT Press, 1 book
 Smart Graphics, 6 articles, 2005-2006
 Leonardo Journal, 2 articles, 2003
 Configurations Journal, 7 articles, 2002-present
 AfriCHI 2016
 Transactions on Computer-Human Interaction
 Digital Futures Initiative Review, Ontario College of Art and Design University, 2010.
 International Society of Electronic Arts Jury, 2010.
 John Simon Guggenheim Memorial Foundation, 2006, 2009.
 Wiener Wissenschafts-, Forschungs- und Technologiefonds (WWTF) - Vienna Science and Technology Fund, 2008.
 ACM Multimedia Jury, 2007 –
 Computer - Human Interaction (CHI) , 2006
 Ubicomp, 2005 - 2006
 Hexagram Comité des directeurs d'axes, 2005 - present.
 Smart Graphics 2004-2006
 Hexagram Research and Creation Committee, 2004-2005
 Rockefeller Foundation Media Arts Program, 2003-2005
 Canada Council / National Sciences and Engineering Research Council New Media Initiative, 2003
 "Review of Physics Curriculum Project." Annenberg Foundation, 1988.

Reviews by Peers *Reviews by Peers*

Joe Ferguson, "Sha Xin Wei & the Synthesis Center," Straight Talk, *SciArt Magazine*, December 2018, <https://www.sciartmagazine.com/straight-talk-sha-xin-wei.html>, Retrieved 16 December 2018.
 Michael Uhall, "Review: *Poiesis and Enchantment in Topological Matter* by Sha Xin Wei," *Configurations*, 25.4, Fall 2017, p. 563-566.
 Cathy Davidson, *The New Education: How to Revolutionize the University to Prepare Students for a World in Flux*, Basic Books, 2017. *Regarding AME program*, 141-147.
 Satinder Gill. *Tacit Engagement*. Springer-Verlag, 2015.
 Jay Murphy, Review of *Poiesis and Enchantment in Topological Matter*, *Afterimage*, 41.6 , May-June 2014.
 Michael Shanks. *Archaeologies of Presence: Art, Performance and the Persistence of Being*. Eds. Michael Shanks, Gabriella Giannachi, Nick Kaye, Routledge, 2012.

Reviews by Peers

- Stephen Wilson. *Art+Science Now*. London: Thames & Hudson, 2010.
- Anna Munster. *Materializing New Media: Embodiment in Information Aesthetics*, Dartmouth University Press, 2006.
- Lucy Bullivant. *Responsive Environments : Architecture, Art and Design*. Paperback ed: Victoria and Albert Museum, 2006, pp. 74-75.
- Isabelle Valverde, *Interfacing Dance and Technology: a Theoretical Framework for Performance in the Digital Domain*, Portuguese Gulbenkian Foundation and the Foundation for Science and Technology Book Series, (Ph.D. Dissertation, UC Riverside 2004).
- Lucy A. Suchman. *Human-Machine Reconfigurations Plans and Situated Actions*. 2nd Edition. Cambridge; New York: Cambridge University Press, 2006, p. 281.
- Bernadette Wegenstein. *Getting under the Skin : Body and Media Theory*. Cambridge, MA: MIT Press, 2005.
- Bolter, J. David, and Diane Gromala. *Windows and Mirrors : Interaction Design, Digital Art, and the Myth of Transparency*. Cambridge, Mass.: MIT Press, 2003, p. 114-129.
- Benjamin Weil, "TGarden," *Leonardo*, Volume 35, Number 4 , October 2002.
- New York Digital Salon, Tenth Anniversary. For TG2001 production of TGarden, with Sponge, as one of the 100 most influential works of new art since the 1960's, Oct. 2002.
- ArchiNed Netherlands Review of Architecture and Art, <http://www.archined.nl/news/0110/tgarden.html> , 2001.
- Patrick Lichty, "Building a Culture of Ubiquity," VOYD, <http://www.voyd.com/ubiq/space.htm> . 2001.

Companies**Companies, Start-ups**

- [Weightless Studio](#), Co-founder 2020
- EXPRR, Co-founder, 2020
- XPRR, Co-founder, 2018
- Alkemie Atelier, Co-founding director, 2012
- Community Capital, 2010
- Pliant Research Group – co-founder, 1997
- sponge media art group – co-founder, 1997

Personal Information

- Personal Information:** Born in Washington, D.C. Married. Lives in Phoenix Arizona and Montréal Québec. Son and daughter.
- Working Languages:** English, native; Chinese, native speaking; Italian, speaking and reading; French, reading; American Sign Language