

Pamela L. Jennings, Ph.D., MBA

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EDUCATION

Ph.D., International Center for Advanced Inquiry in Integrative Arts

School of Computing, Electronics and Mathematics, University of Plymouth (UK), (2006).

Master of Business Administration, Ross School of Business, University of Michigan (2013).

Master of Fine Arts, Computer Arts, School of Visual Arts, New York, (1996).

Master of Arts, Photography & Digital Media, New York University International Center of Photography, (1990).

Bachelor of Arts, Psychology with secondary Vocal Studies, Oberlin College & Conservatory, (1986).

LIFELONG LEARNING

Academic Leadership Academy (2019). Center for Study of Higher Education, College of Education, Penn State Univ.

Leadership Winston-Salem (2016). Flagship Program designed to ignite community leaders with a mission of educating, connecting, and energizing to serve and improve the community of Winston-Salem, North Carolina.

CAREER

HIGHER EDUCATION

Accreditation Leader, College of Computing & Digital Media, School of Design, DePaul University (2020).

Led the external ten-year academic program review to evaluate: 1) intellectual currency of the academic program; 2) quality of faculty and scholarship; and 3) additional areas as determined by the dean.

Head & Professor Department of Art + Design, College of Design, North Carolina State University (2018-2020).

Responsibilities: curriculum alignment revisions; student and faculty recruitment; program assessment; student and faculty mentoring; operational and crisis management for two undergraduate, two minor, and one graduate program.

Assistant Professor, Carnegie Mellon University, Pittsburgh, PA (2001-2008).

Held the first joint appointment between the School of Art, College of Fine Arts and the Human Computer Interaction Institute, School of Computer Science.

Responsibilities: Developed undergraduate and graduate curriculum for technology-based creative practices and human computer interaction in subjects and research including computer programming; physical computing (MAKING); interaction design; graphic design; and critical theory of technology.

ACADEMIC, CORPORATE & FEDERAL RESEARCH

Keynote Speaker: Disrupting Innovation Culture (current)

Insights for designing inclusive cultures in higher education and industry, Represented by: [Executive Speakers Bureau](#).

Executive Director, Center for Design Innovation (CDI), University of North Carolina System, (2014-2017).

Part laboratory, workshop and convening space, CDI programs spanned from research in advanced imaging and movement studies research to community-focused creativity workshops. **University Partners:** Winston-Salem State University, UNC School of the Arts, Forsyth Technical Community College, and Wake Forest Innovation Quarter.

Responsibilities: I completed the construction of the new 24,000 sq. ft facility - a ten-fold increase in facilities; realigned mission, vision, and goals to strategically leverage the new building and the goals of our local university and community partners; created and launched a development plan; broadened community engagement activities; increased three-fold the number of student interns from universities and community colleges in North Carolina.

Director, Shapiro Center Research & Collaboration, School of the Art Institute of Chicago, (2012-14).

Supporting faculty professional development and building corporate and City of Chicago partnerships.

Responsibilities: Led the development of a school-wide intellectual property policy; negotiated corporate sponsorship contracts; developed and managed faculty seed grant program; mentored faculty on research methodologies and grant writing.

Program Director, National Science Foundation, Arlington, Virginia, (2009-2011).

Computer & Information Science & Engineering, Information & Intelligent Systems, Cyber-Human Systems.

Responsibilities:

- **Program Lead:** CreativeIT program, a cross-directorate initiative that funded research projects integrating the Arts, Design, and STEM in areas of creative cognition, creativity support tools, and STEAM learning initiatives. Internal funding negotiations included programs throughout CISE, SBE, and EHR directorates.
 - **Program Co-Manager:** Cyber-Human Systems (formerly Human Centered Computing) program.
 - **Cognizant Program Officer:** Cyberlearning Transforming Education and Computer Research Infrastructure.
 - **Program Advisor:** Small Business Innovative Research (SBIR) for Learning Technologies and Research Experiences for Undergraduates (REU).
 - **Federal Committees:** NSF Delegate to the Federal Council on the Arts and Humanities; and the Networking & Information Technology Research and Development Alliance - Social, Economic and Workforce Group.
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Director, Advance Research Technology Lab Banff New Media Institute (BNMI), Canada (2008-2009).

Concurrent Positions: Research Chair, Alberta Informatics Circle of Research Excellence (iCORE); Visiting Professor, University of Calgary, School of Computer Science.

Responsibilities: Rebuilt and led the BNMI lab after two years dormancy; identified and hired international cohort of emerging designers, artist and technologist from Canada, Austria, Colombia, Hong Kong, and the United States, as research associates; supported collaborative and individual research projects in virtual and augmented reality, multimodal interfaces, physical computing, 3D rapid prototyping, and creative software application development.

Design Researcher, Center for Technology in Learning, SRI International, Menlo Park, CA (1998-2001).

Preeminent center for research on progressive learning methodologies and educational technologies.

Responsibilities: Worked on a variety of research projects applying learner-centered pedagogy as the core engine of knowledge-based systems, applications, and curriculum STEM subjects from mathematics to chemistry. Developed learning games to test natural language processing research for the Science, Technology, & Research (STAR) lab.

Design Researcher, User-System Ergonomics Lab, IBM Almaden Research, San Jose, CA (1996-1998).

IBM Research lab headed by an IBM fellow and team of computer scientists, engineers, and cognitive scientist.

Responsibilities: Collaborated as a design researcher on projects that included augmented workspaces, near field wireless human-to-human/machine communication, cognitive tutors, and the *New Paradigms for Using Computers* colloquia.

Senior Project Manager, IBM Advanced Internet Technology, San Jose, California (1996-1998).

alphaWorks.ibm.com, an IBM Internet Brand Product

Responsibilities: Lead project management and liaison between the IBM working group and 3rd party marketing agency for the design of alphaWorks brand treatment, and development of web site development and community forum features to build bridges between IBM computer science research, IBM enterprise solutions, developments in the JAVA programming language, and 3rd party developers.

CEO & CTO, CONSTRUKTS, Inc., Sparking the aha! in Learning, (2014 – current).

<https://www.construkts.com>

A consumer electronics company developing connected IoT and mixed-reality education technologies poised to disrupt the forward-facing edge of new education technology learning spaces.

- **Core Funders:** National Science Foundation –CISE Human Centered Computing, CISE Cyber-manufacturing, & Small Business Innovative Research grants; Alberta Informatics Circle of Research Excellence.
- **Corporate partners:** Wolfram Research, Inc.; Microsoft HoloLens® for Academic Research; Highway1.io Hardware Start-up Accelerator (a PCH International Company); Daedalus Product Design; & San Juan Software.

NATIONAL & INTERNATIONAL BUSINESS CONSULTING & POLICY INITIATIVES

INTERNATIONAL

Business Development Consultant, Habitat for Humanity Hungary, (2013).

Co-led a team from the University of Michigan Ross School of Business to evaluate and recommend business strategies for long-term value growth for the people and communities served. This U.S. based non-profit organization had unique opportunities and challenges operating in Eastern Europe. Our work helped the organization's leadership apply business strategies to strengthen their value proposition, program offerings, financial wellness, and leveraging government and private markets for the development of under-utilized housing assets in the region.

Co-Author, Helsinki Agenda: strategy on international development of new media culture policy, (2004).

Co-author of declaration written and presented to the Finnish Ministry of Culture in dialogue with international experts in new media cultural policy from the 12th International Symposium on Electronic Art, International Federation of Arts Councils and Culture Agencies (IFACC), Arts Council of Finland, and m-cult Centre for new media culture.

Business Development Consultant

Network Interface for Cultural Exchange, RIXC Center for New Media Arts, Riga, Latvia, (2001).

Co-led a business development and networking workshop for digital media community organizations in Northern and Eastern Europe. Introduced the findings of the *New Media Arts | New Funding Models* Rockefeller report to an international audience for best practices in sustaining community engagement initiatives.

Keynote Panel, The Association of Independent Colleges of Art & Design (AICAD) Consortium, (2012).

Coordinator, Remaking Research: The Political Economies of Art and Design Research, conversation with Sara Diamond, former President of Ontario College of Art & Design and Pamela L. Jennings Ph.D., Emily Carr University, Canada.

NATIONAL

Founding Member Board of Directors, Nation of Makers, (2017-current).

Non-profit organization designated to continue the mission of President Obama's *Nation of Makers* Whitehouse initiative. The organization supports the Maker movement across the United States and other countries in the Americas and the Caribbean with a community-of-practice network that aggregates resource opportunities for institutions and communities that value the role of MAKING for cultural expression, creativity and economic development.

Report *New Media Arts | New Funding Models*, Rockefeller Foundation Creativity & Culture Division, (2000).

Author and Researcher, for the commissioned report identifying patterns for sustainability in organizational structures and philanthropic, federal, and corporate funding mechanisms for New Media Arts practices in the United States.

National Academies of Sciences (NAS), Washington, D.C.

Committee Member, The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine: Branches from the Same Tree, National Academies of Sciences, Engineering, & Medicine (2016-2018).

Overseen by the Board on Higher Education and Workforce (BHEW), this committee of leaders in higher education and industry produced a consensus report examining evidence that educational programs that mutually integrate learning experiences in the arts, humanities, and STEM lead to improved educational and career outcomes.

Additional Engagements with the NAS

- **Keynote Panel, Arthur M. Sackler Colloquia of the National Academies of Sciences, (2018).**
Creativity & Collaboration: Revisiting Cybernetic Serendipity, Washington, DC.
- **Invited Participant, National Academies of Sciences Keck Futures Initiative (NAKFI), (2015).**
Art, Design, Science, Engineering & Medicine Frontier Collaborations, University of California, Irvine.
- **Curator, Cultural Programs of the National Academies of Sciences, (2007).**
Speculative data and the creative imagination: Shared visions between art and technology exhibition.

National Science Foundation Workshops & Advisory Boards

- Advisor, Art of Science Learning, NSF Advanced Informal Learning Sciences initiative, (2012-2013).
- Funder | Advisor, NSF Network for Science, Engineering, Art, and Design Research, (SEAD), (2013).
- Funder | Presenter, NSF Workshop, Media Systems Workshop, University of California, Santa Cruz, (2012).
- Funder | Presenter, NSF Workshop, Planning the Network for Science, Engineering, Art, and Design (SEAD), Maryland Institute College of Art, Baltimore, Maryland, (2011).
- Funder | Presenter, NSF Workshop, Network for Science, Engineering, Art, and Design (SEAD), Center for Design Innovation, University of North Carolina, Winston-Salem, (2011).
- Funder | Co-chair, NSF Workshop, Establishing a Network of Excellence for Art + Science +Technology, Rensselaer Polytechnic Institute, Troy, N.Y., (2011).
- Funder, NSF Workshop, Bridging STEM to STEAM: Developing New Frameworks for Art-Science-Design Pedagogy, Rhode Island School of Design, (2011).
- Funder | Co-chair, RE/search: art, science, technology: Joint meeting between the National Science Foundation and the National Endowment for the Arts, Arlington, Virginia, (2010).
- Presenter, NSF CreativeIT Investigators Meeting, Designing Critical Creative Technologies to Support Collaboration in Public Spaces and Speculative Data and the Creative Imaginary Exhibition at the National Academies of Sciences, Arlington, Virginia. (2009).
- Presenter, NSF IGERT Workshop, MAST09 The Future of Interactive Media: Workshop on Media Arts, Science and Technology, University of California at Santa Barbara, (2009).
- Presenter, NSF Workshop, Success factors in creativity in research and education, Arizona State University, (2008).
- Presenter, NSF Workshop Creativity in Information Technology for Science, Engineering and Design, Resources and Models for creative digital media research, Washington D.C., (2006).
- Presenter, NSF Workshop, Creativity Support Tools, Washington D.C., (2005).
- Advisory Board, NSF Advanced Informal Learning Sciences initiative, Attention, Emotion, and Judgment: how do minds figure out what to do? Exploratorium: Museum of Science, Art, and Human Perception, (2004-2008).

FELLOWSHIPS & ARTISTS' RESIDENCIES

- Fellowship, Carnegie Mellon University Wimmer Teaching Fellows, (2006).
- Fellowship, STUDIO for Creative Inquiry, Carnegie Mellon University, (2001-2004).
- Fellowship, The MacDowell Colony, Peterborough, New Hampshire, (1993).
- Residency, Dance and the Camera, Banff Centre for the Arts, Banff, Canada, (1992).
- Residency, Experimental Television Center, Owego, New York, (1992).
- Residency, Banff Centre for the Arts, Visual Arts and Media Program, Canada, (1990).
- Residency, Women Make Movies, Artist-In-Residence Program, New York, New York, (1990).

COMMUNITY ENGAGEMENT

Winston-Salem, North Carolina, (2014-2017)

- Planning Committee, Leadership Winston-Salem Program, (2016-2018).
- Board of Directors, Winston-Salem Chamber of Commerce.
- Board of Directors, Downtown Winston-Salem Partnership.
- Advisory Board, Winston-Salem Chamber of Commerce Technology Council.
- Advisory Board, Wake Forest Innovation Quarter Entrepreneurial Ecosystem Group.
- Board, Winston-Salem Black Theater Ensemble Hall of Fame Committee.
- Community Advisor, Wake Forest Innovation Quarter Discussion on Domestic Violence, (2016).

Chicago, Pittsburgh, Silicon Valley, New York City

- Advisory Board, Museum of Science and Industry Black Creativity Group, (2011-2013).
- Board of Directors, GLENDA Community Volunteer Organization, (2004-2005).
- Mentor at-risk students, Realizing Intellect through Self-Empowerment, Atherton-Menlo High School, CA, (2000).
- Board of Directors, New York Media Alliance for independent film and video makers, (1992-1996).
- Mentor at-risk students, New York University Stay in School Partnership Mentoring Program, (1987-1990).

GRANTS

Grand Total \$1,196M

Organizational & Professional Development

Sub Total \$152K

2018	VF Corporation for the NC State Art2Wear Production	20
2016	Winston-Salem Foundation Grant	36
2015	DataMax Foundation.	44
2007	NSF EAGER: Exhibition-Speculative data and the creative imaginary.	48
2006	Fellowship, Carnegie Mellon University Wimmer Teaching Fellows.	4

Computer Science Research

Sub Total \$879K

2015	Facebook Research Oculus Rift Equipment Grant.	20 (value)
2015	Microsoft HoloLens ® for Academic Research Equipment and Training.	50 (value)
2015	National Science Foundation (NSF) EAGER Cybermanufacturing.	150
2014	Highway1 Hardware Business Start-up Accelerator (Convertible Note).	45
2013	NSF Small Business Innovative Research (SBIR) Phase 1.	150
2008	Research Chair, Alberta Informatics Circle of Research Excellence.	250
2007	NSF EAGER: Critical creative technologies for public spaces.	198
2006	Carnegie Mellon University Berkman Faculty Research Fund.	8
2004	Carnegie Mellon University Berkman Faculty Research Fund.	8

Arts Funding

Sub Total \$165K

2005	Pennsylvania Council on the Arts.	5
2001	Rockefeller Foundation Creativity & Culture Division.	95
1999	Rockefeller Foundation, Commissioned Report.	20
1996	New York State Council on the Arts, Media Arts.	15
1994	New York State Council on the Arts, Media Arts.	15
1992	New York State Council on the Arts, Media Arts.	15

CONFERENCE, EXHIBITION, & GRANTS REVIEW PANELS

- Reviewer, National Science Foundation, CISE grant program, (2015).
- Reviewer, School of the Art Institute of Chicago Faculty EAGER Research Grant Program, (2012).
- Reviewer, National Science Foundation, CISE grant program, (2012).
- Reviewer, National Science Foundation, CISE grant program, (2009).
- Reviewer, National Science Foundation, CISE grant program, (2007 x2).
- Programming Committee, ACM Tangible and Embedded Interaction conference, (2007).
- Portfolio Reviews, Graduate Digital Media program, Rhode Island School of Design, (2005 & 2006).
- Reviewer, ACM Computer Human Interface Conference (CHI) papers, (2006).
- Reviewer, ACM SIGGRAPH conference course proposals, (2004).
- Reviewer, Digital Boundaries, ACM Multimedia Conference paper and exhibition programs, Columbia University, (2004).
- Reviewer, Film/Video/Multimedia Fellowship Rockefeller Foundation, (2000).
- Reviewer, Computer Supported Collaborative Learning Conference papers, Stanford University., (1999).
- Reviewer, ACM Computer Human Interface Conference (CHI) papers, (1998 & 1999).
- Nominator, Rockefeller Foundation Media Fellowship Awards, (1998 & 1999).
- Jury, SIGGRAAPH Digital Salon Exhibition, New York, New York, (1996).
- Jury, International. New Festival for Film and Video at the New York Joseph Papp Theater, (1993, 1994, 1995).
- Panel, FIX-IT Women in the Arts, College Arts Association Women's Caucus, (1993).
- Reviewer, Experimental Television Center Finishing Funds Grant Program, Owego, New York, (1992).

PRESS COVERAGE & INTERVIEWS

Microsoft HoloLens for Academic Research (2015)

- WinBeta, Microsoft hands out first HoloLens academic research grants.
- Digital Trends, Microsoft issues \$100,000 and two HoloLens kits to five different schools nationwide.
- Yahoo Finance, Microsoft issues \$100,000 and two HoloLens kits to five different schools nationwide.
- Endgadget, Microsoft will hand out \$500K to these five HoloLens grant winners.

CONSTRUKTS, Inc. (2014-2017)

- Disruptor Daily, Top 10 Internet of Things Companies Disrupting Education, Disruptor Daily Blog.
- GigaOm, A connected grill, smart textiles and the perfect keyboard make up Highway1's latest startup class.
- Techcrunch, Hardware Accelerator Highway1's Second Batch.

Center for Design Innovation (2015 – 2016)

- Cross Currents Art + Learning Conference. Interview for the Center for Design Innovation., Winston-Salem, NC.
- Center for Design Innovation Promotes Makerspaces, Creativity, Collaborations, Univ. of North Carolina Blog.
- Center for Design Innovation opens new building in Winston-Salem, in the Winston-Salem Journal.
- Learn: Center for Design Innovation: Innovation Engine Joins the Wake Forest Innovation Quarter Community, Inside Innovation Quarter, Fall, 2015 Issue.
- Center for Design Innovation Celebrates Opening of New Facility in Wake Forest Innovation Quarter.
- Thriving at intersection of art and technology: CDI's Director is creating a mosaic of design, innovation entrepreneurship, in Triad Business Journal, July 24-30, 2015.
- Center for Design Innovation awarded HoloLens developer kits from Microsoft, to add hologram augmented reality to its line of research, published in Yes Weekly.

National Academies of Sciences: Speculative Data and the Creative Imaginary Exhibition (2007)

- Art meets tech, Washington Post, August 4, 2007, Page C02.
- Best bet art: Speculative data and the creative imaginary: shared visions between art and technology, WETA Television Broadcasting for Greater Washington D.C.

Interviews

- Dail, Whitney. Art & Science Talk with Pamela L. Jennings, NEA Art Works Blog, (February 7, 2013).
- Mirapaul P. An electronic artist and his body of work, New York Times: Cybertimes interview (1997).
- Art as signal: Inside the loop exhibition catalog, Krannert Art Museum, University of Illinois, (1996).
- The Townsend Report. Cinema verite and the sisterhood: Black women filmmaker's television interview, New York City Cable Television, (1991).
- CBC Radio Canada. This Week from the Banff Center Public radio interview, Alberta Canada, (1990).

BOOK CHAPTERS, JOURNAL ARTICLES & COMMISSIONED REPORTS

Creative Practice & Research

Welbon Y., Juhasz A., (eds). Jennings P., et.al. (contributors) (2018). Sisters in the Life: A History of African American Media-Making, Duke University Press.

Hicks, Cinqué (2011). Circuit Jamming: Artists doing digital media now, The International Review of African American Art, Vol. 23, no. 3, Hampton University Press.

Jennings P. (2010). "Critical Creative Technology and the Tangible Social Interfaces", in, "Shared Encounters: Content Sharing as Social Glue in Public Places," (eds.) K. Willis, G. Roussos, M. Struppek, K. Chorianopoulos, Springer Press.

Jennings, P. (2007). Speculative data and the creative imaginary: Shared visions between art and technology, Issues in Science and Technology, Vol. 23(3), National Academies of Sciences & University of Texas at Dallas Press.

Jennings, P. (2007). Exhibition Catalog, "Speculative Data and the Creative Imaginary: shared visions between Art and Technology." National Academies of Sciences, National Science Foundation & ACM Creativity & Cognition conf.

Farrington, L. (2005). Creating their own image: The history of African American women artists, chapter Post Black Art and the New Millennium, pp. 283-284, Oxford University Press.

Alejandro J., Jennings, P., Ortega H., Tribe, M. Yang, C. (2004). Digital Boundaries: ACM Multimedia Interactive Art Program exhibition, Multimedia IEEE, Vol. 11(44), pp. 8-9, October-December 2004.

Jennings, P. (2001). Poetics of Engagement, Convergence: The Journal of Research into New Media Technologies: Intelligent Environments, Vol.7(2), pp. 102-111.

Mohammad, E. (2001). Race in digital space: Conceptualizing the media project, Art Journal, College Arts Assoc. V60(3)

Jennings, P. (2000). New Media Arts | New Funding Models, commissioned report for the Creativity and Culture division of the Rockefeller Foundation.

Mohammad, E. (1999). Black high-tech documents, (eds.) Phyllis R. Klotman and Janet K. Cutler, Struggles for representation: African American documentary film and video, Indiana University Press.

Jennings (1999). Book Cover, Struggles for Representation: African American Documentary Film and Video, (eds.) Phyllis R. Klotman and Janet K. Cutler, Indiana University Press.

Mohammad, E. (1998). 1997 Flaherty Seminar, AfterImage Journal, Winter Volume 1998.

Jennings, P., et.al (1998). Evolution 2.0 generative arts CD ROM, Inter-Society for Electronic Arts (ISEA98), Liverpool, United Kingdom.

Jennings, P. (1996). Narrative structures for new media, Leonardo Journal for Art and Science, vol. 29(5), pp. 345-350.

Jennings, P. (1995). Interpretation on the electronic landscape: A conversation with Toni Dove, Felix: a Journal of Media Arts and Communication, Vol. 2(1), pp.266-278.

Jennings, P. (1995). Frontier wanderings: Writings and computer-generated images, Felix: a Journal of Media Arts and Communication, Vol. 2(1), pp. 291-293.

Jennings, P. (1995). Image reproduction from "Solitaire: dream journal" CD ROM, Leonardo Journal for Art and Science, vol. 28(5), p. 457.

Jennings P. (1991). Photographs in Voices Newsletter, Harlem School of the Arts, Vol. 2, No. 1.

Jennings (1983). GRASP: World Trade Tower Assignments Essay, American Photographer Magazine.

Jennings (1982). Best Photography of the Year Annual, Photographer's Forum.

Education & Technology Research

Shneiderman, B. Fischer, G., Czerwinski, M. Resnick, M. and Myers, B. (with contributions from Jennings, P. et. al) (2006). Creativity support tools: Report from a National Science Foundation sponsored workshop, International Journal of Human-Computer Interaction, 20(2), pp. 61-777, Lawrence Erlbaum Associates.

Jennings, P. and Giaccardi, E. (2005) Creativity Support Tools and the New Media Arts Community: NSF creativity support tools workshop white paper, National Science Foundation, Washington D.C.

Penuel, Michalchik, Daniels, Jennings, Stites, Yarnall, Kim (2001). Community technology centers case study report: Learning with technology in six communities, report for the US Dept. of Education.

Penuel, Kim, Barron, Coleman, Gray, Jennings, Michalchik, Shear (2000). Promising practices and organizational challenges in community technology centers, SRI International, Menlo Park, California.

Technical Papers

Jennings P. (1999). Field Survey Research in Augmented Reality: the state of the art.

Hoffman F., Jennings P., Vogt F. (1998). Digital Coach: A Computerized Exercise System, IBM Almaden Research Ctr.

PEER-REVIEWED CONFERENCE PAPERS

Jennings P. (2019). Building a Creative Computational Pedagogy from Bauhausian Foundations, New Media Caucus of the College Art Association, University of Michigan, Ann Arbor.

Jennings P., McGee J (2017). CONSTRUKTS Toolkit: Mixed Reality Construction Kit Interactive Demo, 2017 Wolfram Research Conference, Urbana-Champaign, Illinois.

Jennings, P., Castro Martinez, D. (2011). CONSTRUKTS Toolkit: 802.15.4 Wireless Construction Kit Interactive Demo, 2nd International Conference on Computation and Creativity, Mexico City.

Jennings, P., Castro Martinez, D. (2010). "CONSTRUKT/VizM: a framework for rendering tangible constructions", in SIGRADI 2010: XIV Congress of Iberoamerican Society of Digital Graphics, University of Los Andes, Colombia.

Jennings, P. (2010). CONSTRUKTS toolkit system architecture, Sketching in Hardware Colloquium, Art Centre College of Design, Pasadena, California.

Kirton, T., Jennings P., Ogawa, H. (2010). TextDraw: A prototype for gestural typesetting, ACM Tangible Embedded and Embodied Interaction, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Fischer, G., Jennings P., Maher, M., Resnick, M, Schneiderman, B., (2009). Creativity challenges and opportunities in social computing panel, ACM Computer Human Interaction Conference, Boston, MA.

Jennings, P. (2008). Prototyping for 802.15.4 wireless applications, Sketching in Hardware Colloquium, Rhode Island School of Design, Providence, Rhode Island.

Jennings, P. (2008). CONSTRUKTS, ACM Computer Human Interaction Interactivity program, Florence, Italy.

Jennings, P. (2008). Visual vectors and public interfacing, ACM Computer Human Interaction Urban Mixed Realities Workshop, Florence, Italy.

Jennings, P. (2007). Speculative data and the creative imaginary: Shared innovative visions between art and technology, ACM Creativity and Cognition Conference, Washington D.C.

Jennings, P. (2007). Engagement in the public sphere using tangible social interfaces, Shared encounters workshop ACM CHI conference, San Jose, California.

Jennings, P. (2007). Interdisciplinary methods for the design of tangible social interfaces, Tangible user interface in context and theory workshop ACM CHI conference, San Jose, California.

Jennings, P. (2007). Interactive Technologies for the Public Sphere: towards a theory of critical creative technology, Planetary Collegiums "Review of the future" symposium, Montreal, Canada.

Jennings, P. (2005). Tangible social interfaces: Critical theory, boundary objects and design methods, 2005 ACM Creativity and Cognition Conference, pp. 176-186, University of London Goldsmith.

Jennings, P. (2005). Constructed Narratives, a tangible social interface, 2005 ACM Creativity and Cognition Conference, pp. 263-266, University of London Goldsmith.

Jennings, P. (2005). Distributed Minds | Negotiated Spaces: Framework for designing tangible social interfaces for public dialogue, Human Computer Interaction Consortium, Winterpark, Colorado.

Jennings, P. (2004). Constructed Narrative, Intersubjectivity and Interaction panel ISEA2004, Helsinki, Finland.

Jennings, P., Jaime A. (2004). ACM multimedia interactive art program: An introduction to the Digital Boundaries exhibition, ACM International Multimedia Conference, pp. 979-980, Columbia Univ. New York City, ACM Press.

Jennings, P. (2004). Crossing boundaries: Fostering interdisciplinary arts practice and human computer interaction research teams, Cross-dressing and border crossing: Exploring experience methods across disciplines workshop, ACM Computer Human Interaction conference, Vienna, Austria.

Jennings, P. (2004). Teaching design to technologist; Teaching technology to designers and artists, Design and HCI Workshop, ACM CHI 2004 conference, Vienna, Austria.

Jennings, P. (2004). Distributed Minds | Negotiated Spaces: Social interfaces for public spaces, Reflective HCI: Towards a critical technical practice workshop, ACM CHI 2004, Vienna, Austria.

Jennings P., Scupelli P. (2003). Constructed Narratives: Using play to breakdown social barriers, Interactive Experience Forum Interact 2003 conference, Zurich, Switzerland.

Jennings P. (2002). Social networks and social interfacing Consciousness Reframed: Fourth International CAiiA-STAR Research Conference, Curtin University of Technology, Perth, Australia.

Anders P, Jennings P, Little G, Lichty P. (2000). Interrogation of Space in Three Acts: a Panel on Space, Architecture, and Electronic Arts, ISEA2000, Paris, France.

Jennings P. (2000). Distributed Minds/Negotiated Spaces, Consciousness Reframed, Univ. of Wales College Newport.

Jennings P. (2000). Distributed Minds/Negotiated Spaces: Framework for Mapping Interaction Patterns in an Augmented Environment, Towards a Science of Consciousness Conference poster, University of Arizona.

Penuel, W. R., Coleman, E. B., Means, B., Fenton, J., Jennings, P., Murray, F. G., & Chung, M. (2000). Measuring students' environmental awareness and skill in data analysis and interpretation: Designing Web-based assessment for the GLOBE program, AERA Conference, New Orleans, Louisiana.

Jennings P. (1999). ART-I-TRONICS: Designing technologies for the post-structural age, International Workshop on Physicality and Tangibility in Interaction: Towards New Paradigms for Interaction Beyond the Desktop, I3net Annual Conference: New Visions of Information Technology Products in Everyday Life, Università degli Studi di Siena, Italy; (eds.) D. Roy and M. Panayi, Southern Danish University.

Jennings P. (1999). Building Blocks for Constructing Social Narratives: a Framework for Augmenting Physical Space with Distributed Intelligence, I3net Annual Conference: Community of the Future, (eds.) M. Caenepeel, D. Benyon, D. Smith, Human Communication Research Centre, Edinburgh.

Jennings P. (1999). Smart art: The fusion of art and advanced computer science, Invencao: Thinking the Next Millennium, Sao Paulo, Brazil.

Jennings P. (1999). ART-I-TRONICS: Designing technologies for the post-structural age, CADE99: Computers in Art and Design Education conference, University of Teesdale, Middlesbrough, England.

Jennings P. (1998) the book of ruins and desire Interactive Sculpture, Evolution 2.0 generative arts panel, ISEA98, UK.

Jennings P. (1997). Narrative structures for new media, Hypermedia and technology panel, ISEA97, Chicago.

CONFERENCE KEYNOTES, PANELS & CHAIRS

Keynotes

- College Art Association New Media Caucus Symposium: Border Control, plenary session, Building a Creative Computational Pedagogy from Bauhaus Foundations and artist talk, Speaks Volumes, Univ. of Michigan, (2019).
- Dialog 2.0: Social Movements, Online Communication & Transformation Symposium, Communication Changes: Evolution, Update, & Experience panel, Department of Communication NC State, (2019).
Arthur M. Sackler Colloquia of the National Academies of Sciences: Creativity & Collaboration: Revisiting Cybernetic Serendipity, NAS committee on Integrative Learning Panel, Washington, DC, (2018).
- Humanities & STEM at Duke: A Conversation on Teaching and Learning, Duke University NextEd Festival, Durham, North Carolina, (2018).
- Forging Integrated Expertise in Graduate Education Symposium: Diverse Experiences, Workforce Needs, and the Way Forward, National Academies of Sciences Report Findings, Genetic Engineering & Society Center, North Carolina State University, (2018).
- Duke University, Dept. of Art, Art History and Visual Studies, Lecture and Course Portfolio Critique, (2016).
- Center for Design Innovation: DRIVE: Developing Research Center for Advanced Technology, Creativity and Design for the University of North Carolina System. (multiple keynotes 2014 - 2016).
- Indiana University, School of Informatics and Computing, Keynote, Making Subjectivities: HCI formation of the User, Bloomington, Indiana, (2014).
- Iowa State University, Human Computer Interaction Program Keynote, Emerging Technologies, (2014).
- Maryland Institute College of Art, Lecture, Baltimore, Maryland, (2013).
- National Academies of Science Art and Science Rendezvous, Lecture, Washington D.C., (2011).

- School of the Art Institute of Chicago Lecture, Research at an Arts School, Chicago, Illinois, (2011).
- Virginia Tech, Lecture, Learning in the Creative Sandbox, Blacksburg, Virginia, (2011).
- Rensselaer Polytechnic Institute, EMPAC, Cybernetics: art, design & mathematics Conference, Presentation, CONSTRUKTS Toolkit, Troy, New York, (2010).
- Banff New Media Institute, Symposium, Grounding open source hardware, Canada, (2009).
- Newcastle University, Culture Lab Symposium, Creative digital media research practice: Production through exhibition, United Kingdom, (2009).
- Dartmouth College, Hanover, New Hampshire, (2008).
- Banff New Media Institute, Alberta, Canada, (2007).
- Arizona State University, Arts, Media and Engineering, Phoenix, Arizona. (2007).
- Georgia Institute of Technology, Digital Media Program, Atlanta, Georgia, (2007).
- Southern Graphics Council, Lecture, Points, Plots and ploys, Social Agency of Printmaking in Public Spaces, Kansas City, Missouri, (2007).
- Simon Fraser University, School of Interactive Art and Technology, Vancouver, Canada, (2006).
- Carnegie Mellon University, University College of Fine Arts Lecture, Pittsburgh, Pennsylvania, (2006).
- Spelman College, Lecture, Reel Women Artist Lecture Series, Atlanta, Georgia, (2006).
- Carnegie Mellon University, Lecture, Shape grammars and folded spaces, Computational Design Laboratory Lecture Series, School of Architecture, Pittsburgh, Pennsylvania, (2005).
- CAIIA-STAR Hochschule für Gestaltung und Kunst, Lecture, Nomadic transitions: Dialogue on art and technology symposium, Zurich Switzerland, (2003).
- Syracuse University, Media Arts Program, Syracuse, New York, (2002).
- Curtin University of Technology, Lecture, Biennial of Electronic Arts, Perth, Australia, (2002).
- CAIIA-STAR at University of Arizona, Lecture, NeuroNetworks, Tucson, Arizona, (2002).
- CAIIA-STAR at Galleria Civica di Arte Moderna e Contemporanea, Lecture, E-NAISSANCE: New configurations of mind, body and space, Turin, Italy, (2001).
- Arts Alliance Laboratory, Lecture, CriT 1.4, San Francisco, California, (2001).
- CAIIA-STAR at Ecole Nationale Supérieure des Beaux-Arts Lecture, Art in the Post-Biological Era Symposium, Paris, France, (2000).
- Banff New Media Institute, Lecture, Living Architectures Summit, Banff, Canada, (2000).
- CAIIA-STAR at Digital Arts Symposium University of Arizona, Lecture, Distributed Minds/Negotiated Spaces: A framework for mapping discursive interaction patterns in an augmented environment, Tucson, Arizona, (2000).
- CAIIA-STAR at University of Wales College Newport, Lecture, Distributed Minds/Negotiated Spaces: A framework for mapping discursive interaction patterns in an augmented environment, Wales, UK, (1999).
- Banff New Media Institute, Lecture, ART-I-TRONICS: Designing technologies for the post-structural age, Navigating Intelligence Summit, Banff, Alberta, (1999).
- CAIIA-STAR at Universidade Federal do Rio de Janeiro, Lecture, Smart Art: The fusion of art and advanced computer science, Rio de Janeiro, Brazil, (1999).
- CAIIA-STAR at C.Y.P.R.E.S. (Centre Interculturel de Pratiques Recherches et Echanges Transdisciplinaires), Lecture, ART-I-TRONICS: Designing technologies for the post-structural age, Marseilles, France and Le Grenier du Sol, Avignon, France, (1999).
- Rensselaer Polytechnic Institute, Lecture, Retrospective, iEAR Studio, Troy, New York, (1995).
- Rutgers University, Mason Gross School of Arts, New Brunswick, New Jersey, (1992).

Conference Panels

- Society for Cinema and Media Studies, Sisters in the Life panel, Toronto, Canada, (2018).
- University of Michigan, Alliance for the Arts in Research Universities, Keynote, Research Platforms for Arts and Sciences, Ann Arbor, Michigan, (2017).
- National Academies of Sciences, The Faculty and Practitioner Perspective on Integration of Arts, Humanities, and STEMM, Panel Moderator, Arizona State University, (2017).
- Venture Café - Entrepreneurship from the local to the global, Winston-Salem, North Carolina, (2017).
- Wake Forest University, Center for Innovation, Creativity & Entrepreneurship, Course Capstone Review, (2016).
- SXSW (South by South West), Panel, Elevate the Game, Blacks in Technology, Austin, Texas, (2013).
- Ford Foundation Fellows Conference Panel, Working across disciplines: Crafting interdisciplinary projects, Newport Beach, California, (2010).
- SIGGRAPH '10, Panel, Grand challenges in education, Los Angeles, California, (2010).
- Museum of Modern Art Gramercy Theater, Digital Salon's International Digital Art and Culture Symposium, Panel, The artist as programmer, New York, New York, (2003).

- Aspen Institute Experts Meeting: Interpreting culture and communication technologies: Potentials for new approaches, Aspen, Colorado, (2002).
- National Association for Media Arts and Culture (NAMAC), Panel, Agents of Change Artists and Technology, Pull focus, pushing forward conference, Seattle, Washington, (2002).
- Sony Wonder Technology Lab, Panel, Race in digital space, New York, New York, (2002).
- SRI International, Panel, Redefining reach: Community models for art and technology, Art frontiers: Partnerships in Art and Industry Conference, Menlo Park, California, (2000).
- IBM Palisades Conference Center, Panel, Creative Caveat, New York State Governor's Conference on Art and Technology, Palisades, New York, (1998).
- National Museum of Women in the Arts, Panel, New forms of interactivity, Women and the Art of Multimedia conference, Washington D.C., (1997).
- Swarthmore College, Lecture, Retrospective, 8th Annual Sager Symposium, Swarthmore, PA, (1996).
- Women Make Movies, Panel, Emerging producers & directors' workshop, NY, New York, (1992).

Conference Workshop Chairs

- Co-chair, STUDIO program, Association for Computing Machinery (ACM) Tangible Embedded and Embodied Interfaces Conference, Massachusetts Institute of Technology, Cambridge, Massachusetts, (2010).
- Co-chair, ACM Computer Human Interaction Conference Workshop, About Face: Interface: Creative engagement in new media arts and human computer interaction, Montreal, (2006).
- Co-chair, ACM Multimedia Conference Interactive Art Exhibition, Columbia University, NYC, (2004).

EXHIBITIONS

- School of the Art Institute of Chicago, *ArtWorks6*, Staff Exhibition, (2013).
- Telus Science World, ACM Multimedia Conference. Exhibition, *Border Zones*, Vancouver, Canada, (2008).
- Spelman College Museum of Fine Arts *Cinema Remixed and Reloaded: Black women artists and the moving image since 1970*, Atlanta Georgia, (2008).
- August Wilson African American Cultural Center. Future Tenant Gallery, *Power*, Pittsburgh, Pennsylvania, (2007).
- National Academies of Sciences Rotunda Gallery, *Speculative data and the creative imaginary: Shared visions between art and technology*, Washington D.C., (2007).
- 707 Contemporary Gallery, *Crossing Lines: Art in an age of all*, group exhibit with Pamela L. Jennings, Diane Samuels, Tony Oursler, and Chan Schatz, Santa Fe, New Mexico, (2006).
- Fe Gallery Summer *Solo Show*, Extant Entities, Pittsburgh, Pennsylvania, (2006).
- Parsons Design, *Creating Their Own Image: A history of African American. Women Artists*, New York City, (2005).
- Kiasma Museum of Contemporary Art, *Koodattu Kokemus (Wireless Experience)*, Inter- Society for Electronic Arts (ISEA) conference, Helsinki, Finland, (2004).
- Studio Museum of Harlem, *Authenticating Digital Art: Expression and cultural hybridity*, New York, NY, (2002).
- MIT List Center for the Visual Arts, *Authenticating Digital Art: Expression and Cultural Hybridity, Race and Digital Space Conference*, Cambridge, Massachusetts, (2001).
- Carleton University, *Art ex Machina Computer Art: 1970's-1999*, Ottawa, Canada, (1999).
- IBM Palisades Conference Center, *NY State Governor's Conference on Art & Technology*, Palisades, NY, (1998).
- Cornell University, *Flaherty Workshop on Independent Film*, Ithaca, New York, (1997).
- Goethe-Institut, *Women and the art of multimedia*, Washington D.C., (1997).
- Rotunda Gallery, *Luminous Bodies*, Brooklyn, New York, (1996).
- SIGGRAPH *New York Digital Salon*. School of Visual Arts, New York, NY, (1995 & 1996).
- Joseph Papp Theater, *International New Festival for Film and Video*, New York, NY, (1991, 1993, & 1996).
- Centre de Cultura Contemporania de Barcelona, *3rd Mostra de Video Independent*, Spain, (1996).
- School of Visual Arts SOHO Gallery, *Magic*Data*, New York., New York, (1996).
- Krannert Art Museum, University. of Illinois at Urbana-Champaign, *Art as Signal: Inside the loop*, (1995).
- Colgate University, *Multiple Mediations*, Hamilton, New York, (1995).
- Lincoln Center *New York Film and Video Festival*, New York., NY, (1995).
- Anthology Film Archives, *Mix Experimental Film Festival*, New York., NY, (1994).
- 494 Gallery, *Break Through: Stonewalls*, New York, New York, (1994).
- ...*those fluttering objects of desire installation collaboration produced by Shu Lea Cheang.*
 - Whitney Biennial, ...*those fluttering objects of desire*, New York, New York, (1993).
 - Exit Art Gallery, ...*those fluttering objects of desire*, New York, NY, (1992).
- Museum of Modern Art & American Federation of Arts, *Video Art: The first 25 years*, New York, NY, (1993).

- Museum of Modern Art, *Video Viewpoints*, New York, New York, (1993).
- Video Etc..., *Montage 93 International Festival of the Image*, Rochester, New York, (1993).
- Artspace, *Video Review*, Wellington, New Zealand, (1993).
- Herstory Archives, *Imaginaires*, New York., NY, (1993).
- Outfest Film Festival, Los Angeles, California, (1992).
- Frameline International Film Festival, San Francisco, California, (1992).
- Randolph Street Gallery, *In the Outdoor*, Chicago, Illinois, (1992).
- Black Filmworks Festival, Oakland, California, (1992).
- Downtown Community Television, *Look Out Festival*, New York, NY, (1992).
- Montreal International Festival of Women's Films and Videos, *Silence Elles Tournent*, (1991).
- *7th Annual International Women's Day Video Festival*, Boston, Massachusetts, (1991).
- St. Lawrence University, *St. Lawrence Festival of the Arts - Out Art*, Canton, New York, (1991).
- Banff Centre for the Arts, *Residency Show*, Banff, Canada, (1990).
- New York University, *Media Alliance Conference*, New York, NY, (1990).
- Society of Photographic Education Exhibit, *FLX -IT: The state of women in photography education*, presented at Rochester Institute of Technology; Univ. of Minnesota; Univ. of California, Santa Cruz; and Rutgers Univ, (1989).
- Soho Photography Gallery. New York, NY, (1987).
- Allen Art Museum Conservation Association Hall. *Solo Show*, Oberlin College, Oberlin, Ohio, (1986).