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## Ruth West, Ph.D., MFA

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### EDUCATION

2021	PhD	University of Westminster, London, UK
2002	MFA	Design   Media Arts, University of California, Los Angeles
1990	MA	Clinical Psychology, Antioch University, Los Angeles, California
1983	BS	Microbiology, University of California, Los Angeles

### PROFESSIONAL EXPERIENCE

University of North Texas	
Professor (Tenured)	2018 – Present
Associate Professor (Tenured)	2013 – 2018
Director	2014 – Present
Cross appointments: College of Visual Art and Design, College of Engineering, College of Information, courtesy appointment in College of Science. Founder/director: xREZ Art + Science Lab.	
Research Fellow, iSchool, Information Sciences, University of Illinois, Urbana-Champaign	2022 – 2024
International Advisory Board Member, Swiss Center for Design and Health	2019 – Present
University of Tasmania, Hobart, Australia, Provost's Visiting Scholar/Professor	2015
University of California	2003 – 2012
Principal Investigator	2010 – 2012
CRCA, Calit2, University of California, San Diego	
Director, Interactive Technologies	2008 – 2010
CENS: Center for Embedded Networked Sensing, University of California, Los Angeles	
Director, Visual Analytics and Interactive Technologies	2004 – 2008
National Center for Microscopy and Imaging Research, University of California, San Diego	
Creative and Scientific Consultant	2011
Recoding-Innovation: NSF sponsored documentary production	
Information Architect/Designer	2004
National Center for Microscopy and Imaging Research	
Management	1991 – 2000
JCAHO Accreditation Consultant, Los Angeles, California	1998 – 2000
Operations Development Manager, Cedars Sinai Medical Network Services	1997 – 1998
Service Line Manager, Cedars Sinai Health System	1991 – 1997

Research	1982 – 1991
Manager, Cedars Sinai Molecular Diagnostics Laboratory	1990 – 1991
Manager, Medical Genetics Laboratory, Cedars Sinai Medical Center	1987 – 1989
Research Associate, Department of Medicine, UCLA	1982 – 1986

## GRANTS/SPONSORSHIP

2022 - 2024	National Aeronautics & Space Administration, AIST ESTO, \$1.4M / \$103K PI
Pending	Australia National University, Visual Arts Endowment Fund, \$25K AUD
2021 – 2022	Aesthetics and performative dimensions of teaching, \$5,000, UNT Internal, Co-PI
2020 – 2024	National Science Foundation, NRI: FND/CISE \$750K /\$182K PI West
2020 – 2025	NASA Space Agency Agreement, MRET: Mixed Reality Engineering Toolkit
2018	BenQ America Corporation, in-kind \$4800
2018	ACM SIGGRAPH Art Gallery, Exhibition Sponsorship, \$10,315
2015 – 2018	National Endowment for the Arts, ArtWorks, \$25K
2013 – 2018	National Science Foundation, CISE HCC, \$900K / \$296K PI West
2016 – 2018	National Academy of Sciences/Keck Futures Initiative, \$100K, Co-PI
2015	Provost Visiting Scholar Fellowship Grant, University of Tasmania, \$8K AUD
2015	Gensler Architects, in-kind \$50K
2014	I-GRO Global Discovery, \$5K, UNT Internal
2012	University of California Institute for Research in the Arts UCIRA \$5K
2010 – 2015	National Science Foundation, DEB IBIV, \$1.2M / \$300K PI West
2009	NVIDIA University Professor Partnership, in-kind \$10K
2008 – 2010	National Science Foundation, CISE CGV \$100K
2008	Da-Lite Screen Company, in-kind \$10K
2008	Ingenuity Festival Cleveland, Exhibition Sponsorship, \$5K
2007	CAMERA \$25k
2007	Calit2 \$25K
2007	Meyer Sound Laboratories, in-kind \$15K
2007	ActivMotif, \$500
2007 – 2011	NIH/NINDS R01: PI: Maryann Martone \$2.3M / Co-I West
2005	University of California Institute for Research in the Arts UCIRA Grant, \$5K
2005	Banff Centre for the Arts, Canada, co-production, Awarded, but declined
2003	Intel Corporation, in-kind \$15K
2003	NEC Solutions America, Inc., in-kind \$30K

## PUBLICATIONS/CREATIVE WORK

Peer-Reviewed Publications

Note: \* = an advised student co-author

In preparation Hays\* K., Hillard\* L., Lane\* B., Kajihara\* M., Beyer\* M., Poyser\* D., Parola\* M., Sanandaji\* A., Grimm C., West R. Adaptation of Dreyfus's Model of Skill Acquisition to 3D Volume Segmentation.

2024 Robinson, A., Grimm, C., West, R., Fitter, N. (2024) An Exploration of Mock Scenarios as a Prospective Method for Informing Law and Policy Thinking on Service Robotics, Companion of the 2024 ACM/IEEE International Conference on Human-Robot Interaction (HRI '24 Companion) (HRI) <https://doi.org/10.1145/3610978.3640566> (*forthcoming*).

- 2023 Grubb, T., Kullman, K., Clune, T., Lait, L., Zwicker, M., Guimond, S., West, R., Eastman, R., Afflerbach, I.\*, & Engel, D. (2023). Using XR for Improving Scientific Discovery with Numerical Weather Models. *IGARSS 2023 - 2023 IEEE International Geoscience and Remote Sensing Symposium*, 1537–1540. <https://doi.org/10.1109/IGARSS52108.2023.10282886>
- 2023 Balali, S.\*, Hudspeth, M.\*, Afflerbach, I.\*, Helgesen, H.\*, McCurry, J.\*, Al-Afia, W. A.\*, Bruslind, K.\*, Hays, K.\*, Sowell, R. T., West, R., & Grimm, C. M. (2023). Development and Evaluation of Exploratory Experiences to Facilitate Reasoning About Robotic Systems. *2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 4107–4114. <https://doi.org/10.1109/IROS55552.2023.10342409>
- 2023 Balali, S.\*, Afflerbach, I.\*, Sowell, R. T., West, R., & Grimm, C. M. (2023). Towards Improving User Expectations of Robots by Leveraging Their Experience With Computer Vision Apps. *2023 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*, 2226–2231. <https://doi.org/10.1109/RO-MAN57019.2023.10309524>
- 2023 Cole, J.\*, Hays K.N.\*, West, R. (2023). Designing Beyond Current Conceptualizations of Spaceflight Experiences. *Proceedings of ACM SpaceCHI*, June 22-23, MIT Media Lab
- 2022 Hays K.N.\*, Barrera A.\*, Oladapo L.L.\*, Olumuyiwa O.\*, Payne J.\*, Rashid M.\*, Stanley J.\*, Stocker L.M.\*, Leug C.P., Twidale M., West, R. (2022) A state of the art and scoping review of embodied information behavior in shared, co-present extended reality experiences. *Electronic Imaging*, 34 (12), 298-1-298–19. <https://doi.org/10.2352/EI.2022.34.12.ERVR-298>.
- 2021 West R, Tiwari C, Keathly D. (2021) Interdisciplinary X+CS Program Design: A report on requirements capture and cross-disciplinary dialogue for design of adaptive and flexible program templates. NSF CUE Next program white paper
- 2021 Sanandaji, A., Grimm C., West R., Sanchez CA. (2021). Developing and Validating a Computer-Based Training Tool for Inferring 2D Cross-Sections of Complex 3D Structures. *Human Factors: The Journal of the Human Factors and Ergonomics Society*. 10.1177/00187208211018110. (Peer-reviewed journal paper)
- 2020 West, R., Mendelowitz E.\*, Thomas Z.\*, Poovey C.\*, Hillard L.\*, Hays K.\*, Helgesen N.\* (2020) Designing a VR Arena: Integrating Virtual Environments and Physical Spaces for Social Sensorial Data-Driven Experiences, *Electronic Imaging, The Engineering Reality of Virtual Reality 2020*, pp. 360-1-360-9(9) <https://doi.org/10.2352/ISSN.2470-1173.2020.13.ERVR-360> (Peer-reviewed conference paper)
- 2020 West, R, and Burbano A., (2020) “Editorial. AI, Arts & Design: Questioning Learning Machines.” *Artnodes*, no. 26 (July). <https://doi.org/10.7238/a.v0i26.3390>. (Editorial essay, Journal issue)
- 2020 West R., and Burbano A., *Editors*, AI, Arts & Design, Artnodes Journal, No. 26, July (2020) <https://www.raco.cat/index.php/Artnodes/issue/view/28774>. (Journal Issue) West
- 2020 Sanandaji\*, A., Grimm, C., West, R., Parola\*, M., Kajihara\*, M., Hays\*, K., Hillard\*, L., Lane\*, B., Beyer\*, M. (2020). Analyzing 3D Volume Segmentation by Low-level Perceptual Cues, High-level Cognitive Tasks, and Decision-making Processes. *ArXiv:2004.02989 [Cs]*. <http://arxiv.org/abs/2004.02989>

- 2018 West R., Johnson V., Yeh I.C., Thomas Z., Tarlton M., Mendelowitz E. (2018) Experiencing a Slice of the Sky: Immersive Rendering and Sonification of Antarctic Astronomy Data. *Electronic Imaging Proceedings of Engineering Reality of Virtual Reality*. (Electronic Imaging journal paper)
- 2018 Parola M.J., West R., Herrington R., Adams C., Beyer M., Davis B., Hays K., Hillard L., Kajihara M., Khoja Z., Lane B., Ligon N., Poyser D., Thyagarajan G., Starkweather J. (2018) From Being There to Feeling Real: The Effect of Real World Expertise on Presence in Virtual Environments. *Electronic Imaging Journal - Proceedings of Engineering Reality of Virtual Reality*. (Peer-reviewed journal paper)
- 2017 Lewis, J. P., Yeh, I.C.\*, Migalska, A., Johnson, S. B.\*, & West, R. (2017). Exploring the Definition of Art Through Deep Net Visualization. Presented at the NIPS 2017 Workshop: Interpreting, Explaining and Visualizing Deep Learning, Long Beach, CA. <http://www.interpretable-ml.org/nips2017workshop/papers/01.pdf> (Peer-reviewed workshop paper)
- 2017 Sanandaji A\*, Grimm C, and West R. (2017) Inferring Cross-sections of 3D Objects: A 3D Spatial Ability Test Instrument for 3D Volume Segmentation. *ACM Symposium on Applied Perception*, 16-17 September 2017, Cottbus, Germany, (Peer reviewed conference paper)
- 2017 Sanandaji A\*, Grimm C, and West R. (2017) Capturing How Data Influences Tool Choice in 3D Volume Segmentation. *ACM Symposium on Applied Perception*, 16-17 September 2017, Cottbus, Germany, (Peer reviewed poster)
- 2017 Sanandaji A\*, Grimm C, and West R. (2017) Analyzing Experts' Low-Level Perception Tasks While Doing 3D Image Segmentation, *TAPIA Conference*, September 20-23, 2017, Atlanta GA, (Poster)
- 2016 Sanandaji A\*, Grimm C, and West R. (2016) How experts' mental model affects 3D image segmentation. In *Proceedings of the ACM Symposium on Applied Perception (SAP '16)*. ACM, New York, NY, USA, 135-135. DOI: <http://dx.doi.org/10.1145/2931002.2948718> (Peer reviewed conference paper)
- 2016 West R, Kajihara M\*, Parola M\*, Hays K\*, Hillard L\*, Carlew A\*, Deutsch J\*, Lane B\*, Holloway M\*, John B, Sanandaji A\*, and Grimm C. (2016) Eliciting Tacit Expertise in 3D Volume Segmentation. In *Proceedings of the 9th International Symposium on Visual Information Communication and Interaction (VINCI '16)*. ACM, New York, NY, USA, 59-66. DOI: <http://dx.doi.org/10.1145/2968220.2968235> (Peer reviewed conference paper)
- 2016 Parola, M.\*, Johnson, S.\*, & West, R. (2016). Turning Presence Inside-Out: MetaNarratives. *Electronic Imaging*, 2016(4), 1–9. <https://doi.org/10.2352/ISSN.2470-1173.2016.4.ERVR-418> (Peer reviewed conference paper)
- 2016 Sanandaji A\*, Grimm C., West R., Parola M\*, Kajihara M\*, Deutsch J\*, Carlew A\*, Yates D. (2016) Where do experts look while doing 3D image segmentation. In *Proceedings of the Ninth Biennial ACM Symposium on Eye Tracking Research & Applications (ETRA '16)*. ACM, New York, NY, USA, 171-174. DOI: <http://dx.doi.org/10.1145/2857491.2857538> (Peer reviewed conference paper)
- 2015 Holloway\*, M., Sanandaji\*, A., Yates\*, D., Krigger\*, A., Sowell\*, R., West, R., & Grimm, C. (2015). Guided Structure-Aligned Segmentation of Volumetric Data. In *Advances in Visual Computing* (pp. 307-317). Springer International Publishing. (Peer reviewed journal paper)

- 2015 West R., Malina R., Lewis J., Gresham-Lancaster S., Borsani A, Merlo B, Wang L. (2015) DataRemix: Designing the Datamade, Leonardo, Vol. 48, No. 5, MIT Press (Peer reviewed journal paper)
- 2015 West R, Parola MJ\*, Jaycen AR\*, Lueg CP (2015) Embodied Information Behaviors, Mixed Reality and Big Data, Proc. SPIE 9392, Engineering Reality of Virtual Reality 2015 Paper 9392-13 (Peer reviewed conference paper)
- 2014 Meta-Life. Biotechnologies, Synthetic Biology, ALife and the Arts (2014) Leonardo eBook, MIT Press. Editorial committee, invited contributor (Online: <http://synthbioart.texashats.org/about/> and <http://synthbioart.texashats.org/abstracts/>)
- 2014 O'Neil-Dunne, J., MacFaden, S. West, R., Pless, R., (2014). GEOBIA Approaches to Geospaital Data Fusion, South-Eastern European Journal of Earth Observation and Geomatics, Vol 3. No. 25. Pp. 493-498. (Peer reviewed conference paper)
- 2014 West R., Margolis T., Prudhomme A., Schulze JP, Lewis JP, Gossmann\* J, Singh R, Mostafavi\* I. (2014) Scalable metadata environments (MDE): artistically- impelled immersive environments for large-scale data exploration, Proc. SPIE 9012, The Engineering Reality of Virtual Reality 2014 9012 (February 2014) (Peer reviewed journal paper)
- 2013 West R., Malina R., Lewis J., Gresham-Lancaster S., Borsani A, Merlo B, Wang L. (2013) DataRemix: Designing the DataMade Through ArtScience Collaboration. In Proceedings of the IEEE VIS Arts Program (VISAP), Atlanta, Georgia, October 2013. (Peer reviewed conference paper)
- 2013 West R., Monroe L, Ford Morie J, Aguilera J. (2013) Art, science, and immersion: data-driven experiences. Proc. SPIE. 8649, The Engineering Reality of Virtual Reality 2013 86490H (March 4, 2013) doi: 10.1117/12.2008166 (Peer reviewed conference paper)
- 2013 West R, Halley A, O'Neil-Dunne J, Gordon D, Pless R. (2013) Collaborative imaging of urban forest dynamics: augmenting re-photography to visualize changes over time. Proc. SPIE. 8649, The Engineering Reality of Virtual Reality 2013 86490L (March 4, 2013) doi: 10.1117/12.2008109 (Peer reviewed conference paper)
- 2012 West R., Margolis T., O'Neil-Dunne J., Mendelowitz E., Tucek J., Pless R. (2012) Blending Participatory Culture and Urban Ecology: Experiments in Collaborative Imaging for Urban Forest Monitoring. ISEA 2012, Albuquerque NM, September 2012. (Peer reviewed Conference Presentation)
- 2012 Vaughan\* M, West R, Grimm C, Sowell R, Pless R, Kobourov S. 2012. Specializing Interfaces for Citizen Science Segmentation of Volumetric Data. Washington University St. Louis, Department of Computer Science and Engineering, 2012-42. (Technical Report)
- 2012 West R, Margolis T, O'Neill-Dunne J., Mendelowitz, E. (2012) MetaTree: Augmented Reality Narrative Explorations of Urban Forests, Proc. SPIE 8289, The Engineering Reality of Virtual Reality 2012, 82890G (February 9, 2012); doi:10.1117/12.912051 (Peer reviewed journal paper)
- 2011 West R. (2011) "Working with Wetware: Biology and an Expressive Context." In: Context Providers: Conditions of Meaning In Media Arts. Eds. Margot Lovejoy, Christiane Paul, Victoria Vesna. Intellect Ltd. (Book chapter).

- 2009 West R, Lewis JP, Margolis T, Schulze JP, Gossmann J\*, Tenedorio D\*, Singh R. (2009) Algorithmic Object As Natural Specimen: Meta Shape Grammar Objects From Atlas In Silico, Leonardo Electronic Almanac, Vol. 6, Issue 6 – 7, October 2009. (Peer reviewed journal article)
- 2009 Mun M, Reddy S, Shilton K, Yau N, Burke J, Estrin D, Hansen M, Howard E, West R, Boda P. (2009). PEIR, the Personal Environmental Impact Report, as a Platform for Participatory Sensing Systems Research. Mobisys 2009: Proceedings of the 7th International Conference On Mobile Systems, Applications And Services, pp. 55 – 68. (Peer reviewed conference paper)
- 2009 West R, Gossmann J\*, Margolis T, Schulze JP, Lewis JP, Tenedorio D\*. (2009). Sensate abstraction: hybrid strategies for multi-dimensional data in expressive virtual reality contexts. Proceedings of the 21st Annual SPIE Symposium on Electronic Imaging, The Engineering Reality of Virtual Reality, 18-22 January 2009 San Jose, CA, Volume 7238, pp. 72380I-72380I-11 (2009). DOI: 10.1117/12.806928 (Peer reviewed conference paper)
- 2008 J. Gossman\*, B. Hackbarth \*, and R. West, T. Margolis, J.P. Lewis, I. Mostafavi\*. (2008) Scalable Auditory Data Signatures for Discovery Oriented Browsing in an Expressive Context. 14th International Conference on Auditory Display, June 24 - 28, 2008, Paris, France. (Peer reviewed conference paper)
- 2007 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Fernald S \*, Schulze J, Li W, Henthorn T, Yamada T\*, Singh R, Chheng T\*, Cassey T\*, Lien J\*. (2007) ATLAS in silico. Animation: From the Avant-Garde to Popular Culture Symposium, November 1 – 3, 2007 (Invited installation/panel presentation)
- 2007 Fong LL, Larson SD, Gupta A, Condit C, Bug WJ, Chen L, West R, Lamont S, Terada M, Martone ME (2007) "An Ontology-Driven Knowledge Environment for Subcellular Neuroanatomy", OWL: Experiences and Directions, Innsbruck, Austria, CEUR Workshop Proceedings, ISSN 1613-0073, <http://CEUR-WS.org/Vol-258/>, June 6-7, 2007 (Peer reviewed conference paper)
- 2007 Lewis JP, Mostafavi I \*, Sosinsky G, Martone ME, and West R. (2007) Shape Priors by Kernel Density Modeling of PCA Residual Structure. IEEE International Conference on Image Processing, 2007. ICIP 2007. Vol. 4 pp 333 – 336. (Peer reviewed conference paper)
- 2006 Smalheiser NR, Torvik VI, Bischoff-Grethe A, Burhans LB, Gabriel M, Homayouni R, Kashef A, Martone ME, Perkins GA, Price DL, Talk AC, West R. (2006) Collaborative development of the Arrowsmith two node search interface designed for laboratory investigators. J Biomed Discov Collab. 1(1). (Peer reviewed journal article)
- 2005 Singh R, Schwarz N, Taesombut N, Lee D, Jeong B, Renambot L, Lin AW, West R, Otsuka H, Peltier ST, Martone ME, Nozaki K, Leigh J, Ellisman MH (2005). Real-time multi-scale brain data acquisition, assembly, and analysis using an end-to-end OptIPuter, FGCS, Special iGrid 2005 Issue, 1032-1039. (Peer reviewed journal article)
- 2005 Lee D, Ellisman M, West R, Martone M, Lamont S, Peltier S, Hutton T, Deerinck R, Leigh J, Schwarz N, RenambotL, Johnson A, Jeong B, Singh R, Vishwanath V, He E, Xiong C, Taesombut N, Wu X, Weigle E, Chien A, Mambretti J, Chen J, Yeh F, Grossman R, Akiyama T, Date S, Nozaki K, Shimojo S, Mori H, Yamada N, Koike A, Naito S, Otsuka H, ShiWei L, Lin F, Lin S, de Laat C, Stolk B, Koo G. (2005) Real-Time Multi-Scale Brain Data Acquisition, Assembly, and Analysis using an End-to-End OptIPuter, iGRID 2005 Computing Conference, September 26 – 29, San Diego. (Demonstration/technical challenge project and conference presentation)

- 2005 West R, Burke J, Kerfeld C, Mendelowitz E, Holton T, Lewis JP, Drucker E, Yan W. (2005) Both and Neither: in silico v1.0, Ecce Homology. *Leonardo*, 38 (4): 286-293, MIT Press. (Peer reviewed journal article)
- 1995 West R. (1995) Addressing Cultural Diversity: A Model for Interpreter Services. American Hospital Association - Society for Ambulatory Care Professionals, Baltimore, Maryland (Peer reviewed conference presentation)
- 1990 Korenberg JR, Kawashima H, Pulst SM, Ikeuchi T, Ogasawara N, Yamamoto K, Schonberg SA, West R, Allen L, Magenis E, Ikawa K, Taniguchi N, and Epstein CJ. (1990) Molecular Definition of a Region of Chromosome 21 that Causes Features of the Down Syndrome Phenotype. *American Journal of Human Genetics*, 47: 236-246. (Peer reviewed journal article)
- 1989 Korenberg JR, Pulst SM, Neve RL, West, R. (1989) The Alzheimer Amyloid Precursor Protein Maps to Human Chromosome 21 Bands q21.105 - q21.05. *Genomics*, 5:124-127. (Peer reviewed journal article)
- 1988 Korenberg JR, Pulst SM, Kawashima H, Ikeuchi T, Yamamoto K, Ogasawara N, Schonberg SA, West R, Kojis T, and Epstein CJ. (1988) Familial Down Syndrome With Normal Karyotype: Molecular Definition of the Region. *American Journal Of Human Genetics* 43:A110. (Peer reviewed journal article)
- 1988 Pulst SM, Korenberg JR, Pribyl T, Steward GS, Tanzi RE, Van Broekhoven C, West R, and Kojis T. (1988) Chromosome 21 Physical Map: Familial Alzheimer-linked DNA Sequences Cluster in a Probable Hot Spot of Recombination. *American Journal of Human Genetics* 43: A156. (Peer reviewed journal article)
- 1988 Korenberg JR, Pulst SM, West R. (1988) The Alzheimer Precursor Protein Gene maps to Chromosome 21 sub-bands q21.15 - q21.2. *American Association of Neurology*. April. (Peer reviewed abstract/conference presentation)
- 1988 Korenberg JR, Pulst SM, Kawashima H, Ikeuchi T, Yamamoto K, West R, Schonberg SA, and Epstein CJ. (1988) Down Syndrome with Normal Chromosomes: The Genes for Superoxide Dismutase and the Amyloid Precursor Protein Are Not Duplicated. *American Federation for Clinical Research*, 36:404A, Washington, D.C., April 29 to May 2. (Peer reviewed abstract/ presentation)
- 1985 Lusis AJ, West R, Mehrabian M, Reuben MA, Le Bouef RC, Kapstein JS, Johnson DF, Schumaker VN, Yuhasz MP, Schotz MC, and Elovson J. (1985) Cloning and Expression of Apolipoprotein B, the Major Protein of Low and Very Low Density Lipoproteins. *Proceedings Federation of American Scientists and Experimental Biologists*, 44: 5548, Anaheim, California, April 21-26. (Peer reviewed conference presentation)
- 1985 Mehrabian M, Schumaker VN, Fareed GC, West R, Johnson DF, Kirschgessner T, Lin H, Wang X., Ma Y, Mendiaz E, and Lusis AJ. (1985) Human Apolipoprotein B: Identification of cDNA Clones and Characterization of mRNA. *Nucleic Acids Research*, 13: 6937-6953. (Peer reviewed journal article)
- 1985 Lusis AJ, West R, Mehrabian M, Reuben MA, Le Bouef RC, Kapstein JS, Johnson DF, Schumaker VN, Yuhasz MP, Schotz MC, and Elovson J. (1985) Cloning and Expression of Apolipoprotein B,

the Major Protein of Low and Very Low Density Lipoproteins. Proceedings of the National Academy of Sciences, 82: 4597-4601. (Peer reviewed journal article)

- 1984 A.J. Lusis, K. Reue, L. Metza, R. West, and R.C. LeBoeuf. (1984) Regulation of Apolipoprotein E Gene Expression in the Mouse. American Society of Biological Chemists, St. Louis, Missouri, June 6. (Peer reviewed conference abstract/presentation)

### Conference Abstracts (Peer-reviewed)

- 2023 Grubb, T., Kullman, K., Clune, T., Lait, L., Zwicker, M., Guimond, S., West, R., Eastman, R., Afflerbach, I.\*, Engel, D., Ames, T., & Hosler, J. (2023). Lagrangian Visualization Using Extended Reality For Earth System Models. AGU American Geophysical Union Conference, Poster IN43B-0626, December 11-15, 2023, San Francisco, CA.
- 2021 Turner, M. L., West, R., Carpendale, S., Segal, A., & Keefe, D. (2021). Navigating Interdisciplinary Careers in Visualization. *IEEE VIS 2021*, 3. [https://virtual.ieeevis.org/year/2021/session\\_v-panels-panel1.html](https://virtual.ieeevis.org/year/2021/session_v-panels-panel1.html) (Peer-reviewed panel)
- 2021 West R, Dolinsky M, Hernon D, Niles S, Severson K, Triscott N. (2021) Shaping the Future of XR and the Arts. IEEE Virtual Reality 2021 Conference, <https://ieeervr.org/2021/program/panels/#P2>, (Peer-reviewed panel)
- 2020 West, R, Mendelowitz E, Thomas Z, Poovey C, Hillard L, Wang L, and Malina, Roger. 2020. “Immersive Rendering and Sonification of Large Scale Antarctic Astronomy Data in Virtual Reality: The Making of INSTRUMENT | One Antarctic Night.” In *SCAR 2020: Antarctic Science - Global Connections*, 35. Hobart, Tasmania, Australia: International Science Council: Scientific Committee on Antarctic Research. [www.scar2020.org](http://www.scar2020.org). (Peer reviewed abstract)
- 2018 Boldon, A., West R., (2018) Co-Chairs, Cities As Labs For Innovation Tackling Global Challenges: Transdisciplinarity And The Future Of The University” (Leonardo Education And Art Forum Leaf), College Art Association Annual Conference (Peer reviewed abstract)
- 2017 Boldon A., West, R., Rudin T., Kahane M. (2017). Cities as Labs for Innovation Tackling Global Challenges: Transdisciplinarity and the Future of the University. A2RU National Conference, Boston. (Peer-reviewed conference abstract/presentation)
- 2017 West, R. (2017). Art Papers Jury: Introduction. *Leonardo*, 50(4), 356–359. [https://doi.org/10.1162/LEON\\_e\\_01452](https://doi.org/10.1162/LEON_e_01452) (Catalog Essay)
- 2015 West R, Malina R, Diamond S, Lapointe, FJ (2015) Challenges, Best Practices, and the Future of Transdisciplinary Collaboration in Media Art, Science and Technology. *Re-Create: Theories, Methods and Practices of Research-Creation in the Histories of Media Art, Science and Technology* Montréal, 5-8 November 2015. (Peer reviewed conference abstract/presentation)
- 2015 Alpert CL., Liarakos CD., O’Neil-Dunne J., Punyasena SW., Winter J., Kner P., West, R., Burnett A., Rosa-Molinar E., (2015) When Experts Collide: Driving Cross-Cutting Innovation in Bio-Imaging & Informatics, *Proc. American Association for the Advancement of Science (AAAS)*, 2015 (Peer reviewed conference presentation)
- 2014 Holloway, M\*, Grimm C, West R, Sowell R\*. (2014) A Guided Approach to Segmentation of Volumetric Data, In *ACM SIGGRAPH 2014 Posters (SIGGRAPH '14)*. ACM, New York, NY, USA, Article 53. DOI=10.1145/2614217.2614243



- 2013 West R, Lewis JP, Burke J, Mendelowitz E, Kerfeld C. (2013) High-Dimensional Calligraphic Visualization of DNA and Protein Sequences. ACM / Eurographics EXPRESSIVE Conference, July 19 – 21, Anaheim CA. (Peer reviewed showcase and conference abstract)
- 2013 West R, Halley A, Gordon D, O’Neil-Dunne J, Pless, R. (2013) Collaborative Rephotography. Proc. ACM SIGGRAPH 2013, 40th International Conference on Computer Graphics and Interactive Techniques, July 21-25, Anaheim, CA. Talks Article No. 20. DOI: 10.1145/2503673.2503693 (Peer reviewed conference abstract)
- 2012 West R, Margolis T, O’Neil-Dunne, Pless, R. Seeing the Forest Through the Trees: Augmenting Urban Forest Monitors through Socially Mediated Citizen Science (2012). Conference presentation: 63rd Annual Meeting of the Histochemical Society, Woodshole Marine Biological Laboratory, March 20 – 23, 2012. (Peer reviewed conference presentation)
- 2009 Dolinsky M, Morie J, Ruzanko S, Shaw C, West R. (2009) VR and Art: Hyp-er-Reality? Panel presentation, IEEE VR Conference, Lafayette Louisiana March 14-18, 2009. (Panel Presentation Abstract)
- 2007 C.K. Liang\*, J.P. Schulze, R. West, M. Martone, M. Zwicker (2007) Bridging the Resolution Gap: Superimposition of Multiple Multi-Channel Volumes. ACM SIGGRAPH 2007 Posters – Visualization Session; Article 121 (Peer reviewed conference poster)
- 2006 Singh R, Mostafavi I \* and West R. Integrated Collaborative Cyberinfrastructure and NCMIR Multiscale Imaging Portal (2006). Supercomputing 2006, November 11 – 17, 2006, Tampa Florida (Conference presentation)
- 2006 L. Fong, L. Chen, R. West, M. Wong, S. Lamont, A. Gupta, M. E. Martone. (2006) OntoQuest: A Dynamic Knowledge Base for Neuroscience. Neuroscience Conference Proceedings, October 14 – 18, 2006. (Peer reviewed conference abstract/presentation)
- 2006 L. Fong, L. Chen, R. West, M. Wong, S. Lamont, A. Gupta, M. E. Martone. (2006) Image Annotation for Electron Tomographic Data. 4th International Congress on Electron Tomography, November 5 – 8, 2006. (Peer reviewed conference abstract and presentation)
- 2005 West R, Burke J, Kerfeld C, Mendelowitz E, Holton T, Lewis JP, Drucker E, Yan W. (2004) Ecce Homology, Design and Visual Communications: Sketches. Proceedings of ACM SIGGRAPH, August 8 – 12. (Peer reviewed conference abstract/presentation)
- 2004 Campbell M, West R, Wolbring G. (2004) Mind Over Kitchen: The Future of Thought Controlled Personal Environments. HorizonZero, 14:March/April. <http://www.horizonzero.ca> (Invited contributor/Canadian new media online magazine)
- 2004 West R, Burke J, Kerfeld C, Mendelowitz E, Holton T, Lewis JP, Drucker E, Yan W. (2004) in silico v1.0: A Discovery Based Model For Art-Science Collaboration. College Art Association, February 18-21. (Peer reviewed conference abstract and presentation)
- 2002 West R. (2002) DNA Dice and Origami Bases: A Genetics and Culture Curriculum. ASCI Art & Science Collaboration Symposium, New York, NY, December. (Peer reviewed conference abstract/presentation)

- 1989 Korenberg JR, Pulst SM, West R, Kojis T. (1989) Physical Mapping of DNA Sequences Linked to Familial Alzheimer Disease. American Academy of Neurology, April. (Peer reviewed conference abstract/presentation)

## Patents

- 2017 West, R., Weiss, P., Polli, A., Kudla, A., Cardier, B., Cassas, N. (2017). *Arrays for Measuring and Interacting with the Body and its Associated Microbiomes*. UNTP.P0017US.P1 (Patent , provisional)

## Creative Work

### Exhibitions (Curated/Juried) and Commissions

- 2023 INSTRUMENT | One Antarctic Night, Interactive installation, virtual reality, multi-channel audio, multi display. University of Maryland (Exhibition *forthcoming*: April - May, 2023)
- 2021 (postponed due to COVID) West, R., Mendelowitz E., Thomas\* Z., Poovey\* C., Hillard\* L., Afflerbach\* I., Helgesen\* H. (2021) INSTRUMENT | One Antarctic Night, Interactive installation, virtual reality, multi-channel audio, multi display. Australia National University Art Gallery, Canberra, Australia (Invited: Postponed due to COVID-19)
- 2020 West, R., Mendelowitz E., Thomas\* Z., Poovey\* C., Hillard\* L., Afflerbach\* I., Helgesen\* H. (2020) INSTRUMENT | One Antarctic Night, Interactive installation, virtual reality, multi-channel spatialized audio, multi display. Beaker Street Festival, Hobart, Tasmania, Australia (Curated: Postponed due to COVID-19)
- 2018 West, R. Johnson\* I., Yeh\* I.C., Thomas\* Z., Mendelowitz E., Berg L., (2018) INSTRUMENT | One Antarctic Night, Interactive installation, virtual reality, multi-channel spatialized audio, multi display. ACM SIGGRAPH 2018, Art Gallery, Vancouver, Canada (Curated: SIGGRAPH 2018 Art Gallery, August 2018)
- 2017 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Schulze J, Li W, Singh R, Prudhomme A, Johnson SB\*, Yeh IC\*. (2017) ATLAS in silico, MONA (Museum of Old and New Art) Tasmania, Australia, MONA FOMA January 2017, (Interactive installation/Curated exhibition)
- 2016 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Schulze J, Li W, Singh R, Prudhomme A, Johnson SB\*, Yeh IC\*. (2016) ATLAS in silico, 9e2 Seattle, 50th Anniversary Exhibition of Nine Evenings, King Station, Seattle, WA, October 2016, (Interactive installation/Curated exhibition)
- 2015 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Schulze J, Li W, Singh R, Prudhomme A, Johnson SB\*, Yeh IC\*. (2015) ATLAS in silico, National Academies of Science / Keck Futures Initiative Exhibition, Beckman Center, Irvine CA, November 11 – 15, 2015, (Interactive installation/Curated)
- 2013 West R, Halley A, O'Neil-Dunne J, Gordon D, Pless R. (2013) Collaborative Imaging of Urban Forest Dynamics. 3rd LHI Art-Sci Symposium: Why Art-Sci? Analyzing a Paradigm. March 23, 2013, Land Heritage Institute, San Antonio, TX. (Site specific participatory mobile app project/invited exhibition and presentation)

- 2013 Robertson L, Adelman A, West R. (2013) Weaving The Future, PEROT Museum of Nature and Science, Dallas, TX, November 2013 (Site specific interactive fiber arts installation and mobile app project/Invited exhibition)
- 2013 West R, Halley A, O'Neil-Dunne J, Gordon D, Pless R. (2013) rePhoto: Relating Urban Ecology to Participatory Culture and ATLAS in silico Social Science, PEROT Museum of Nature and Science, Dallas, TX, June 21, 2013 (Invited presentation/site specific mobile app project and exhibition of two channel video)
- 2012 Lewis, JP, West, R, Margolis T. Algorithmic Objects from ATLAS in silico – Presented in “Out of the Box” Mobile Augmented Reality Art Exhibition, San Francisco, January 2012. (Invited exhibition/Online at: <http://futureofreality.org/OOB-Atlas.html>)
- 2009 West R, Lewis JP, Margolis T, Schulze JP, Gossmann J\*, Tenedorio D\*, Singh R (2009). Multiscale Meta Shape Grammar Objects Visualizing Global Ocean Sampling Expedition Metagenomics Sequences. ACM SIGGRAPH 2009 Information Aesthetics Program, 36th International Conference on Computer Graphics and Interactive Techniques, New Orleans, August 3 – 7. (Peer reviewed exhibition and conference abstract).
- 2009 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Fernald S \*, Schulze J, Li W, Henthorn T, Yamada T\*, Singh R. (2009) ATLAS in silico, FILE09 CAVE, (<http://www.file.org.br/>) Sao Paulo Brazil (July 27 – 31, 2009, Centro Cultural Fiesp Ruth Cardoso - Av. Paulista, 1313, Sao Paulo, Brazil. (Invited exhibition / Interactive installation)
- 2009 West R, Lewis JP, Margolis T, Gossman J\*, Schulze JP. (2009) “...a grain of sand turns the balance.” UC Darnet Scalable Relations Exhibition, curated by Christiane Paul, February 13 – March 13, 2009. (Invited Exhibition)
- 2008 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Fernald S \*, Schulze J, Li W, Henthorn T, Yamada T\*, Singh R. (2008) ATLAS in silico, Los Angeles Municipal Art Gallery, November 6, 2008 – January 19, 2009, Upcoming (Invited exhibition / Interactive installation)
- 2008 Burke J, Estrin D, Hansen M, West R. (2008). PEIR: Personal Environmental Impact Report. WIRED NextFest 2008, September 26 – October 12, 2008. Millennium Park, Chicago. (Mobile app/web service & installation/Invited exhibition)
- 2008 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Fernald S \*, Schulze J, Li W, Henthorn T, Yamada T\*, Singh R. (2008) ATLAS in silico, Ingenuity Festival Cleveland 2008, (Invited exhibition)
- 2007 West R, Margolis T, Mostafavi I\*, Lewis JP, Gossmann J\*, Hackbarth B\*, Horn AS, Fernald S \*, Schulze J, Li W, Henthorn T, Yamada T\*, Singh R, Chheng T\*, Cassey T\*, Lien J\*. (2007) ATLAS in silico, ACM SIGGRAPH 2007 Art Gallery, (Interactive installation/Peer reviewed exhibition)
- 2006 West R, Burke J, Mendelowitz E, Lewis, JP, Kerfled, C. (2006) ACTG to Calligraphy: Genetic Visualization for Ecce Homology. IEEE Information Visualization (Peer reviewed exhibition/conference presentation).

- 2005 West R, Burke J, Kerfeld C, Mendelowitz E, Holton T, Lewis JP, Drucker E, Yan W, Lamont S, Lee D, McQuade L. (2005) *Ecce Homology*. Exhibited at SIGGRAPH 2005, Emerging Technologies. (Peer reviewed exhibition)
- 2003 Kosaka H, Oguri, Birnbaum, N, West R, Burke J, Kerfeld C, Mendelowitz E, Holton T., Lewis JP, Drucker E, Yan W. (2003) *Muddy Robe*. UCLA Fowler Museum. (Invited Performance)
- 2003 West R, Burke J, Kerfeld C, Mendelowitz E, Holton T., Lewis JP, Drucker E, Yan W. (2003) *Ecce Homology*. Exhibited within *From the Verandah: Art, Buddhism, Presence*. UCLA Fowler Museum. (Invited Exhibition.)
- 2002 West R. (2002) *The Trajectory of Forgetting*. MFA Exhibition. UCLA New Wight Gallery, Los Angeles (Exhibition)
- 2002 West R. (2002) *Stars*. (Interactive installation.) Time Forms Exhibition. CRCA @ UCSD La Jolla, California, April 20 – 21. (Group Exhibition).
- 2001 West R, Tributh I. (2001)  $time^n = inspiration^2$ . (Net artwork). Fusion 01. Los Angeles, Weimar, Sydney, June 7 – 10. (Group exhibition)
- 2001 West R, (2001) *Light*. (Video installation) *A Portrayal of Women: Different Mediums, Contemporary*. UCLA Honors Collegium, May 30. (Group Exhibition)
- 2001 West R. (2001) *Twelve Blue*. Los Angeles, California, (Comission, private collection).
- 2000 West R. (2000) *The Gift*. Santa Barbara, California (Commission, private collection).
- 1999 West R. (1999) 20th Anniversary, Group Exhibition - The Rose, Venice, California. (Curated exhibition)
- 1998 West R. (1998) *Seeing as Touch* - The Rose, Venice, California. (Curated exhibition)

## PRESENTATIONS

Co-Chair, Workshop

Reducing Barriers to Understanding COVID Data

March 18-20, 2022

<https://vizbi.org/2022/Workshop/>

Co-organizer, Session

AI, art and social justice: Understanding and addressing bias, representation and inclusive practices in the development of AI systems

ACM SIGGRAPH 2020, BoF, Leonardo/ISAST and ACM DAC

August 26, 2020

Chair, Session

Generative and Machine Creativity: Is AI in the Arts and Design Evolution of “Artistic Intelligence” or Rupture?

College Art Association Conference

Chicago

February 14, 2020

Chair, LEAF / DAC BoF Session  
AI in the Arts and Design  
ACM SIGGRAPH 2019  
Los Angeles, CA  
July 30, 2019

Artist Talk  
INSTRUMENT | One Antarctic Night  
ACM SIGGRAPH 2018 Art Gallery  
Vancouver, CA  
August 14, 2018

Presentation  
xREZ Art + Science Lab – Immersive Visualization  
Electronic Imaging Conference  
Joint Session: ERVR /SD&A  
San Francisco, CA  
February 1, 2018

Invited Speaker  
Institute for Systems Biology  
Seattle, Washington  
October 20, 2016

Keynote  
The Conference Board/Ericsson USA,  
Dallas, Texas  
April 19, 2016

Keynote  
Art, Science, Data and Immersion  
GameFest: Visions of The Virtual Conference  
Rensselaer Polytechnic Institute (RPI), New York  
March 30, 2016

Speaker/Panelist  
State of the Arts: Data is the New Paint  
Dallas Museum of Art, Dallas TX  
September 19, 2016

Plenary Speaker/Panelist  
A2RU National Conference of the Alliance for the Arts in Research Universities  
Virginia Tech, Blacksburg, VA  
November 9, 2015

Computing in Extreme Environments  
University of Tasmania School of Computing, Australia  
July 24, 2015

Inveresk Design Forum Lecture

University of Tasmania School of Architecture and Design, Australia  
July 24, 2015

Art-Science Experts Plenary  
Humana Festival of New American Plays  
Actors Theatre, Louisville, KY  
April 4, 2015

Cultivating New ways of Seeing, Knowing and Experiencing  
Public talk  
ATX Laser, Umlauf Sculpture Garden & Museum, Austin TX  
March 12, 2015

One Antarctic Night  
Invited conference talk  
2015 International Collaboration Meeting on Antarctic Telescopes (AST8), Hong Kong (Streamed, remote)  
March 10, 2015

Cross-Resonance in the Arts and Sciences  
Public Lecture, Places and Spaces 10<sup>th</sup> Anniversary Exhibition  
University of Miami, Florida.  
November 13, 2014

DataRemix: Have we all become information DJs?  
Plenary lecture, VINCI: 7th International Symposium on Visual Information Communication and Interaction  
CSIRO, Sydney, Australia  
August 8, 2014

Rethinking Imagination, Innovation, Knowledge  
Distinguished lecture  
ATLAS Institute, University of Colorado-Boulder  
April 14, 2014  
DataRemix: Have we all become information DJs?  
Big Data Hackathon, Microsoft Technology Center, Irving TX  
March 29, 2014

Art-Science: Practice as Research  
SymbioticA  
University of Western Australia  
February 18, 2014

From Genetic Calligraphy to Scalable Auditory Data Signatures  
University of Technology Sydney  
February 21, 2014

DataRemix: Have we all become information DJs?  
University of Tasmania, Hobart, Australia  
February 10, 2014

ArtScience: Rethinking Imagination, Innovation, Knowledge  
UNT System Building Open House & Ribbon Cutting, Dallas TX

December 4, 2013

Designing the DataMade  
Dallas Contemporary Museum  
October 30, 2013

ArtScience and Data-Driven Experiences  
Oregon State University  
October 24, 2013

ArtScience and Aesthetic Approaches to Multidimensional Data  
Seminar, UNT Computer Science  
September 30, 2013

ArtScience Research  
New Media Graduate Seminar, UNT CVAD  
September 11, 2013

From Genetic Calligraphy to Scalable Auditory Data Signatures  
Texas Advanced Computing Center, Austin, TX,  
August 23, 2013

Aesthetic Approaches to Multidimensional Data  
Day 3 Summit: Microsoft Faculty Research Summit  
University of Washington, Seattle, WA  
July 17, 2013

Advocacy for ArtScience Research and Creative Work  
SEAD, Smithsonian, Washington DC  
May 16, 2013

Art, Science and Immersion  
Big Tent Digital Humanities Event, UNT, April 19, 2013

Multidimensional Data-Spaces to Personal Data Streams  
UT Dallas – ARS Research Colloquium  
March 27, 2013

ArtScience and Data-Driven Experiences  
Plenary/Keynote  
iSchools Conference 2013  
February 14, 2013

Crisis of Representation: The Digitization of Nature and Culture  
University of North Texas  
April 16, 2012 (Invited talk)  
Mobile + CO<sub>2</sub> + U =?  
SANDCHI, San Diego CHI  
January 18, 2012 (Invited talk)

Art-Science: What does it look like?

Interdisciplinary Computing and the Arts, UCSD.  
April 13, 2011 (Invited lecture)

Sensate Abstraction  
School of Interactive Arts and Technology, Simon Fraser University, Vancouver BC.  
February 1, 2010 (Invited talk)

PEIR, The Personal Environmental Impact Report, and Go Green Foundation Pilot  
SCAQMD Conference - New Perspectives on Community Health and Air Quality  
July 24, 2009 (Invited talk)  
From Data Abstraction To Sensate Abstraction  
Media Arts and Technology, UC Santa Barbara  
March 12, 2009 (Invited lecture)

Data Expressionism and Data Surrealism  
Visual Arts Department, California State University Long Beach  
February 18, 2009 (Invited lecture and graduate studio visits)

Massive Multidimensional Data Spaces to Personal Data Streams  
College of Informatics, Northern Kentucky University  
February 3, 2009 (Invited lecture)

Sensate Abstraction  
USC Cinematic Arts and Wrigley Institute for Environmental Studies  
September 13 – 15, 2008 (Invited lecture)

Extreme Scales and Multi-Resonance  
Remix: From Science to Art and Back in the Digital Age: June 3, 2008: Presented as part of The Berkeley  
New Media Arts Festival and Berkeley Big Bang 2008 (Invited Lecture)

Science: What's Art Got To Do With It?  
Indiana University Purdue University, Indianapolis, IN,  
March 29, 2006 (Invited Lecture)

Plenary speaker  
Artistic Approaches to High-Dimensional Visualization  
Association for Laboratory Automation, 10<sup>th</sup> Anniversary Conference  
January 24, 2006

Blending Art and Science  
SXTH 20: Freshman Honors Seminar  
University of California, San Diego  
March 2, 2005, (Invited lecture)

High-Dimensional Information Visualization  
Digital Imaging and Interactivity/ICAM 101  
University of California, San Diego, February 23, 2005 (Lecture)

In silico v1.0: Ecce Homology  
Center for Research in Computing and the Arts/Visual Arts Department  
University of California, San Diego, May 4, 2004 (Invited lecture)



in silico v1: Ecce Homology

R. West, J. Burke, C. Kerfeld, E. Mendelowitz, JP Lewis, T. Holton, E. Drucker, W. Yan

040404 Plasmatica // The Unfolding Of New Structures In Old Spaces

The Department of Art Practice, UC Berkeley, UC Darnet Conference, April 4, 2004 (Exhibition)

Cyberspace: A Workshop on Playing, Gaming and Learning

University of California, Los Angeles

January 23, 2004 (Invited lecture)

Informatics Tools for Scientific Discovery and Collaboration

University of Illinois at Chicago

September 3-5, 2003, (Invited lecture)

Carbon Versus Silicon: Thinking Small/ Thinking Fast

Banff New Media Institute, The Banff Center

August 7 - 10, 2003, (Invited lecture)

Working with Wetware

Darwin Centre, Natural History Museum, London UK

Arts Catalyst, UK, June 20, 2003 (Invited lecture)

In Our Image: Extreme Genetics

Rhizome.LA, [http://rhizome.org/events/rhizome\\_la\\_may.php3](http://rhizome.org/events/rhizome_la_may.php3)

May 12, 2002, (Presenter and panel moderator)

Genetics and Culture

s.i.n.a.p.s.e. & UCLA Design | Media Arts

<http://sinapse.arts.ucla.edu/genetics.htm>

March 8, 2002, (Panel Respondent)

## PRESS

Featured in: DiFaclo, E, *Visceral Data*, a virtual reality video documentary, to be released 2022

Featured in: M. Jue, *Wild Blue Media: Thinking through Seawater*. Durham: Duke University Press Books, 2020.

Art has much to offer artificial intelligence

Universitat Oberta de Catalunya News

<https://www.uoc.edu/portal/en/news/entrevistes/2020/031-west-burbano.html>

SIGGRAPH 2018 Spotlights Women in Computer Graphics

CG Society News

<http://www.cgsociety.org/news/article/3995/siggraph-2018-spotlights-women-in-computer-graphics>

*Digitized Ocean the New Wave*

David Beniuk

The Mercury, Australia

January 22, 2017

[http://www.themercury.com.au/subscribe/news/1/index.html?sourceCode=TMWEB\\_WRE170\\_a&mode=premium&dest=http%2F%2Fwww.themercury.com.au%2Fentertainment%2Fmofo-brings-art-and-science-together-for-3d-experience%2Fnews-story%2F4a4fbaf224eda6c9db13dbb0c9b9d08&mementype=anonymous](http://www.themercury.com.au/subscribe/news/1/index.html?sourceCode=TMWEB_WRE170_a&mode=premium&dest=http%2F%2Fwww.themercury.com.au%2Fentertainment%2Fmofo-brings-art-and-science-together-for-3d-experience%2Fnews-story%2F4a4fbaf224eda6c9db13dbb0c9b9d08&mementype=anonymous)

Online companion article: *MOFO brings art and science together for 3D experience*  
David Beniuk, January 22, 2017, The Mercury Online, Australia

*Swim Through an Ocean of DNA Sequences Using VR*  
Katheine Gillespe  
The Creators Project, January 16, 2017  
<https://creators.vice.com/en-au/article/atlas-in-silico-mofo-2017>

*UNT Freshman View Book*  
Featured: Ruth West - Faculty Excellence, p. 25  
June 2017

*ATLAS in silico* featured listing for 9e2 Seattle  
New Music World  
October 21, 2016  
<http://www.green-wave-email.com/maillsrvc/html/201610210001901.html>

*xREZ: UNT Lab Melds Arts, Science into One*  
Nicholas Sakelaris  
Dallas Innovates, June 22, 2016  
<https://www.dallasinnovates.com/xrez-unt-lab-melds-arts-science-into-one/>

*In The Lab Where Art and Science Fuse*  
Artist Spotlight: Ruth West  
Jerome Weeks, KERA, Art & Seek, NPR, September 22, 2016  
<http://artandseek.org/spotlight/ruth-west/>

*9e2 Brings Tech and Art Together Again*  
T.S. Flock  
Seattle Weekly, August 31, 2016  
<http://www.seattleweekly.com/arts/9e2-brings-tech-and-art-together-again/>

*UNT Professor Gets Grant for Health Sensor*  
Denton Record Chronicle, July 30, 2016  
<http://www.dentonrc.com/entertainment/entertainment-headlines/20160730-briefly-in-the-arts.ece>

*New Federal Arts Grants Go Techno*  
Maria Recio,  
McClatchy Washington DC, December 2, 2014  
[http://www.mcclatchydc.com/2014/12/02/248743\\_new-federal-arts-grants-go-techno.html?sp=/99/200/&rh=1](http://www.mcclatchydc.com/2014/12/02/248743_new-federal-arts-grants-go-techno.html?sp=/99/200/&rh=1)  
Nationally syndicated story also picked up by:

*Star Telegram* (Dallas, TX): <http://www.star-telegram.com/incoming/article4364016.html>

*News Observer* (North Carolina): [http://www.newsobserver.com/2014/12/02/4371147\\_new-federal-arts-grants-go-techno.html?sp=/99/107/&rh=1](http://www.newsobserver.com/2014/12/02/4371147_new-federal-arts-grants-go-techno.html?sp=/99/107/&rh=1)

*Idaho Statesman* (Boise, ID): [http://www.idahostatesman.com/2014/12/02/3520917\\_new-federal-arts-grants-go-techno.html?rh=1](http://www.idahostatesman.com/2014/12/02/3520917_new-federal-arts-grants-go-techno.html?rh=1)

*Arizona Daily Star* (Tucson, AZ): [http://tucson.com/new-federal-arts-grants-go-techno/image\\_10536134-6348-5efb-9f0d-176d0ac7daae.html](http://tucson.com/new-federal-arts-grants-go-techno/image_10536134-6348-5efb-9f0d-176d0ac7daae.html)

*Charlotte Observer* (Charlotte, NC): <http://www.charlotteobserver.com/2014/12/02/5356934/new-federal-arts-grants-go-techno.html#.VKM1SMZ6hUS>

*The Sun Herald* (Mississippi): <http://www.sunherald.com/2014/12/02/5947155/new-federal-arts-grants-go-techno.html>

*The State* (South Carolina): [http://www.thestate.com/2014/12/03/3849696\\_new-federal-arts-grants-go-techno.html?rh=1](http://www.thestate.com/2014/12/03/3849696_new-federal-arts-grants-go-techno.html?rh=1)

*The News Tribune* (Tacoma, WA): [http://www.thenewstribune.com/2014/12/02/3520851\\_new-federal-arts-grants-go-techno.html?rh=1](http://www.thenewstribune.com/2014/12/02/3520851_new-federal-arts-grants-go-techno.html?rh=1)

*The Olympian* (WA): [http://www.theolympian.com/2014/12/02/3458239\\_new-federal-arts-grants-go-techno.html?rh=1](http://www.theolympian.com/2014/12/02/3458239_new-federal-arts-grants-go-techno.html?rh=1)

*Theater Jones* (North Texas): <http://www.theaterjones.com/ntx/news/20141204102732/2014-12-04/NEA-and-Dallas-Arts-District-Give-Local-Grants>

*NEA grants \$297,000 to Nine North Texas Arts Groups*

Jerome Weeks, Art and Seek, Public Media, December 2, 2014

<http://artandseek.net/2014/12/02/nea-grants-to-nine-north-texas-arts-groups-total-217000/>

*Lab Brings Together the Creative and the Calculated*

Matt Wood, North Texas Daily, October 7, 2014

<http://ntdaily.com/lab-brings-together-the-creative-and-calculated/>

*Ruler of the Intersection: UNT Professor Ruth West is Linking Art and Science to Make Both Easier to Understand*

Selected for a feature profile as one of “2014’s Most Interesting People” by the Dallas Observer

Jamie Laughlin, Dallas Observer, People 2014 Issue, June 26, 2014

[http://blogs.dallasobserver.com/mixmaster/2014/06/dallas\\_people\\_ruth\\_west.php](http://blogs.dallasobserver.com/mixmaster/2014/06/dallas_people_ruth_west.php)

[http://features.dallasobserver.com/people\\_2014/](http://features.dallasobserver.com/people_2014/)

*Featured in: Proteus and the Digital: Scalar Transformations of Seawater’s Materiality in Ocean Animations*

Melody Jue

Animation: An Interdisciplinary Journal, 2014, Vol. 9(2) 245-260, SAGE Publications, DOI:

10.1177/1746847714526671

*Can Art Communicate Big Data at a Glance?*

The Chronicle of Higher Education

December 13, 2013, Pg. A10-11

*This UNT Developed Photo App Tracks the World’s Growth in Time-lapse*

Jamie Laughlin, Dallas Observer, July 31, 2013

[http://blogs.dallasobserver.com/mixmaster/2013/07/a\\_photo\\_app\\_being\\_designed\\_in.php](http://blogs.dallasobserver.com/mixmaster/2013/07/a_photo_app_being_designed_in.php)

*There’s an app for that: Exhibit Unveils Way for Smartphone to Make Time-Lapse Photos*

Lucinda Breeding, Denton Record Chronicle, June 6, 2013

<http://www.dentonrc.com/entertainment/denton-time-headlines/20130606-theres-an-app-for-that.ece>

*Conference brings exposure to College of Information,*

Staff Reporter, NT Daily, February 19, 2013.

Print edition and online: <http://ntdaily.com/conference-brings-exposure-to-college-of-information/>

*Featured in: Invisible Vision: Could Science learn from the Arts?*

Wildevuur SE., Houten: Springer, 2009.

*App Turns GPS Phone Data Into Green Report Card*

Ryan Singel, Wired.com, September 29, 2008

<https://www.wired.com/2008/09/app-turns-gps-p/>

*Seeing Science: Sensational Sequences*

Kristin Sainani, Biomedical Computation Review, Fall 2008

<http://www.biomedicalcomputationreview.org/4/4/index.html>

*Computer Graphics Spills From Milk To Medicine*

ATLAS in silico featured in an article about SIGGRAPH 2007.

<http://www.sciencedaily.com/releases/2007/08/070806174335.htm>

*Featured in: Art and Electronic Media (Themes and Movements Series)*

Edited by Edward A. Shanken, 2007 Phaidon Press, United Kingdom.

*Featured in: Art and Biotechnologies (2nd Edition)*

Edited by Ernestine Daubner and Louse Poissant, Groupe De Recherche En Arts Médiatiques (GRAM), Université du Québec à Montréal Press., 2007.

*Art That's A BLAST*

Katharine Miller, Biomedical Computation Review – Stanford, CA, USA, Fall 2005 Vol. 1(2)

*Llegan Los Artistas del Laboratorio*

Eusebio Val, La Vanguardia, Spain, August 16, 2005

*Genetic Calligraphy*

LiveScience.com - New York, USA (LiveScience image of the day, September 30, 2005)

[http://www.livescience.com/imageoftheday/siod\\_050930.html](http://www.livescience.com/imageoftheday/siod_050930.html)

*Ecce Homology*

Aminima :: New Media Magazine, Vol.13, September 6, 2005

*Blending The Human Genome With Art*

Stefanie Olsen, CNET News.com and NYTimes.com, July 27, 2005

[http://news.com.com/Blending+the+human+genome+with+art/2100-7337\\_3-5805639.html](http://news.com.com/Blending+the+human+genome+with+art/2100-7337_3-5805639.html)

*Ecce Homology: Drawing with DNA*

Staff, MedGadget – Internet journal of medical imaging, July 22, 2005

[https://www.medgadget.com/2005/07/ecce\\_homology\\_d.html](https://www.medgadget.com/2005/07/ecce_homology_d.html)

*The Artists in the Hazmat Suits*

Randy Kennedy, New York Times, Arts and Leisure, Section 2, A21, July 3, 2005

*Transgenic Art*

Talk show guest on NPR's "The Connection", February 26, 2004 <http://www.theconnection.org/>

*Genomic Pictograms*

Birgit Reinert, The Genome News Network, November 26, 2003

[http://www.genomenewsnetwork.org/articles/11\\_03/genomic\\_pictograms.shtml](http://www.genomenewsnetwork.org/articles/11_03/genomic_pictograms.shtml)

*Tracing Out a Scientific Discovery*

Harold Lee, The Daily Bruin, (front page story), November 10, 2003

*Skinny Dipping in the Gene Pool*

Birgit Reinert, The Genome News Network, April 4, 2003

[http://www.genomenewsnetwork.org/articles/04\\_03/gene\\_poolart.shtml](http://www.genomenewsnetwork.org/articles/04_03/gene_poolart.shtml)

*Scientists Create Bonds With Artists*

Michael J. Felton and Rachel A. Petkewich, Analytical Chemistry Journal, April 1, 2003

*Quand la génétique devient un outil artistique*

Nicolas Ritoux, La Presse, Actuel, Vendredi 21 Février 2003, p. B1

*Media Arts @ Science: Towards a Collaborative Culture*

Susan Martin, UCLA Arts & Architecture, Volume 6 No. 1, Fall 2002.

*Bioscience Moves into Galleries as Bioart*

Hal Cohen, The Scientist, November 11, 2002.

*Artists Map the Human Genome*

Charlene Roth, Artweek, V. 33 No. 8, October 2002.

Profile – Ruth West – Outstanding Graduate Student

UCLA Graduate Student Quarterly, V11 No 3, Spring 2002, p. 14

*Digital Arts: The Evolution of A Discipline*

Fernando Quintero, UC TltC, March 2002

<http://www.ucltc.org/news/2002/03/feature.html>

## TEACHING / ADVISING

### Courses Developed

Processes and Methodology for Innovation

Methods Employed by Design Researchers

Computers in the Visual Arts

Graduate and Undergraduate: Interdisciplinary Research Studio

Graduate New Media Studio: Art-Based Research and Practice

Get Funded! Savvy Skills For Successful Funding Applications

Physical Computing Boot-Camp: Arduino + Pure Data

Genetics and Culture: From Molecular Music to Transgenic Art

Biotechnology and Society (Molecular Biology Laboratory)

Dynamic Web Design

Acute Spanish: cross-cultural communication training for MDs, RNs, EMTs and other clinicians.

### Teaching

2013 – Present Professor/Associate Professor, UNT

2002 – 2004 Lecturer, Design | Media Arts, UCLA

2002 – 2003 Teaching Fellow, Honors & Undergraduate Programs, UCLA

2002 Teaching Fellow, Collegium of University Teaching Fellows, UCLA

2000 – 2001 Teaching Associate, Design | Media Arts, UCLA

### Advising

#### Graduate Students

2020 – In Progress Kathryn Hays, Information Science, PhD, Major Professor

2021 – 2019 Luke Hillard, Computer Science, MS, Major Professor

2021 – 2019 Christopher Poovey, Music, PhD, Research Mentor

2016 – 2019	Zach Thomas, Music, PhD, Committee Member
2017 – 2018	Max Parola, MA, UI/UX / Design, Major Professor
2014 – 2018	Violet Johnson, Computer Science, PhD, Committee Member
2016 – 2017	Brittany Taylor, Art Education/Museum Education, MA, Research Mentor
2014 – 2019	Anahita Sanandaji, Computer Science, PhD, Oregon State University, Committee
2015 – 2019	I Chen Yeh, Computer Science, MS, Research Mentor
2016 – 2018	Molly Beyer, Anthropology, MS, Research Mentor
2015 – 2018	Ermir Bejo, Music, PhD, Committee Member
2015	Curtis Chambers, Computer Science, PhD, Committee Member
2015 – 2016	Anne Carlew, Psychology, PhD, Research Mentor
2015 – 2017	Amelia Jaycen, Journalism, MA, Committee Member
2015	Duoc Le, Sculpture, MFA, Research Associate
2014	Alejandro Fraile, Music, PhD, Research Associate
2014 – 2015	Julie Libersat, New Media Art, MFA, Research Mentor
2014	Barbara Johnson, Information Science, PhD, Research Mentor
2014	Paulette Lewis, Information Science, PhD, Research Mentor
2013 – 2014	Kathryn Masten-Cain, Information Sciences, PhD, Committee Member
2011 – 2016	Michelle Holloway, Computer Science, PhD, WUSTL, Committee
2011	Ross Sowell, Computer Science, PhD, WUSTL, Committee
2008	Vids Samanta, Computer Science, PhD, UCLA, Research Mentor
2008	Han Suk Kim, Computer Science, PhD, UCSD, Research Mentor
2008	Keui-Chun Hsu, Computer Science, MS, UCSD, Research Mentor
2006 – 2008	Iman Mostafavi, Computer Science, PhD, UCSD, Committee Member
2006 – 2008	Chih Liang, Computer Science, MS, UCSD, Committee Member
2007	Iman Sadeghi, Computer Science, PhD, Research Mentor
2007	Joachim Gossmann, Music, PhD, UCSD Research Mentor
2007	Ben Hackbarth, Music, PhD, UCSD Research Mentor
2005	Nicholas Schwartz, Computer Science, PhD, EVL UIC, Research Mentor

#### Undergraduate Students

2019 – Present	Ian Afflerbach, Computer Science, BS, Honors, Research Mentor
2019	Jared White, Computer Science, BS, Research Mentor
2019 – Present	Jessica McCurry, Integrative Studies, Research Mentor
2019 – 2020	Hannah Helsgen, Mathematics / Computer Science, BS, Research Mentor
2017 – 2020	Claire Adams, Sociology / Journalism, BA, Research Mentor
2015 – 2018	Luke Hillard, Computer Engineering, BS, Research Mentor
2015 – 2017	Brandon Lane, Psychology, BS, Research Mentor
2015 – 2018	Kathryn Hays, Psychology, BS, Honors, Research Mentor
2016 – 2018	James Nash, Radio/TV/Film, BA, Research Mentor
2015 – 2018	Lucero Cantu, Political Science, BS, Research Mentor
2015	Christopher Lee, GIS / Photography, BS, Research Mentor
2014 – 2020	Meghan Kajihara, Anthropology, BS, Research Mentor
2014	Jacob Mitchell, Photography, BA, Research Mentor
2014	Rachel Friedman, Interdisciplinary Studies, BS, Research Mentor
2014 – 2016	Jeremy Deutsch, Behavioral Psychology, BS, Research Mentor
2014 – 2017	Max Parola, Behavioral Psychology, BS, Research Mentor
2013 – 2015	Gabriel Vega, New Media Art, BA, Research Mentor
2013 – 2014	Hayley McGuire, New Media Art, BA, Research Mentor
2007 – 2008	Sam Fernald, Bioengineering, BS, UCSD, Research Mentor
2008	Daniel Tenedorio, Computer Science, BS, UCSD, Research Mentor
2008	Adam Nuhaily, Electrical and Computer Engineering, BS, UCSD, Research Mentor

2008	Chris Young, Electrical and Computer Engineering, BS, UCSD, Research Mentor
2008	Ed Johnson, Electrical and Computer Engineering, BS, UCSD, Research Mentor
2008	Tom Cassey, Electrical and Computer Engineering, BS, UCSD, Research Mentor
2007	Tommy Chheng, Computer Science, BS, UCSD, Research Mentor
2007	Jeff Lien, Electrical and Computer Engineering, BS, UCSD, Research Mentor
2007	Toshiro Yamada, ICAM, BS, UCSD, Research Mentor
2007	David Lai, Electrical and Computer Engineering, BS, UCSD, Research Mentor
2007	Pavel Shekhtmeyster, Computer Engineering, BS, UCSD, Research Mentor
2003	Sarah Jones, Fine Art, BA, UCLA, Research Mentor
2003	Paul Kim, Design   Media Art, BA, UCLA, Research Mentor
2003	Yanina Landa, Mathematics/Design, BS, UCLA, Research Mentor
2003	Lori McMichael, Design   Media Art, BA, UCLA, Research Mentor
2003	Bo Aye, Design   Media Arts, BA, UCLA, Research Mentor

## PROFESSIONAL/SERVICE ACTIVITIES

2024	ACM SIGGRAPH 2024, Chair, Courses Program
2023	Reviewer, NSF Grant Review Panel
2023	ACM SIGGRAPH 2023, Co-Chair, Courses Program
2022	Participant, NSF Workshop, Design of Ethical AI
2022	Reviewer, NSF Grant Review Panel
2022	Chair, Diversity, Equity, Inclusion Council, UNT College of Visual Art and Design
2022 – Present	Academic Integrity Liaison, College of Visual Art and Design
2021 – Present	Co-Chair, Retention, Tenure, and Promotion Committee
2018 – 2020	Jury, ACM Distinguished Artist Lifetime Achievement Award
2018	Nominator, Carl & Marilyn Thoma Art Foundation, Digital Art Writers Awards
2020 – Present	International Advisory Board, Swiss Center for Design and Health
2019 – 2021	Chair, LEAF (Leonardo Education and Art Forum)
2019 – 2021	Board Member, Leonardo/ISAST
2017 - Present	ACM Digital Arts Committee, Member
2017	Chair, ACM SIGGRAPH 2017 Art Papers Program
2017 – 2018	Chair Elect LEAF (Leonardo Education and Art Forum)
2017	Reviewer, IEEE VISAP
2017	K-12 Outreach: UNT Campus, Lynx Academy ( <a href="http://www.lynxscience.com">http://www.lynxscience.com</a> )
2016 – Present	Organizer, North Texas LASER (Leonardo Art Science Evening Rendezvous)
2016 – 2017	Member, UNT CVAD Design Chair, Hire Committee
2016 – Present	MOU, University of Tasmania – University of North Texas Global Exchange
2016	Member, Retention, Tenure, and Promotion Committee
2016	Member, Student Project Grant Review Committee
2016	Reviewer, Focal Press/Routledge
2016	Juror, ACM SIGGRAPH Art Papers
2015 – 2016	Co-Organizer, TxHATS (Texas Humanities, Arts, Technology, Science) Network
2015	Juror, ACM SIGGRAPH Art Papers
2015	Reviewer, IEEE Visualization 2015, VISAP program
2015	Member, Search Committee, CVAD Studio Arts / New Media Faculty
2014 – 2015	Member, Steering Committee, Campus RUVH Tier I Implementation
2015	Invited Participant, National Academies of Science/Keck Futures Initiative ASEM
2014	Member, Search Committee, CVAD Studio Arts / New Media Faculty Hire
2014	Reviewer, IEEE Visualization 2014, VISAP Program
2014 – 2015	Member, Campus Academic IT Committee, UNT
2013 – 2014	Member, Steering Committee, eSpace Digital Arts, Dallas Contemporary Museum

2013 – 2014	Member, Search Committee, CVAD Studio Arts / New Media Faculty Hire
2013 – 2014	Member, Curriculum Redesign Committee, Information Science PhD Program
2014	Participant, UNT Inspiration Award Video Program
2014	Reviewer, iConference 2014 (iSchools Conference)
2013	Member, Search Committee, Associate VP Research, UNT
2013	MOU, UT Dallas ATEC/Leonardo Initiatives
2013	Juror, DNA of Creativity, San Diego Visual Artists Network
2011	Juror, Escondido Municipal Art Gallery, Art-Science exhibition
2010	Participant, NSF Innovations in Biological Imaging and Visualization Ideas Lab
2010	Participant, NSF III 2010 PI Workshop: Information Integration and Informatics
2009	Juror, Escondido Municipal Art Gallery
2008	Reviewer, National Science Foundation, CISE IIS
2008	Participant, NSF Workshop: The Future of HCI for 21st Century Discovery
2007	Advisor, Maryland Science Center, Cellular Universe Exhibit (NCRR/SEPA/NIH )
2007 – 2008	Member, Calit2 Art Gallery Committee
2007	Participant, NSF (OCI) Workshop: Scientific Discovery Through Visualization
2007	Reviewer, Engineering with Computers: Computational Bioengineering
2007	Juror, ACM SIGGRAPH, Art Gallery
2007	Participant, Image2Meaning Workshop (MIT/Apple Computer)
2006	Juror, ACM SIGGRAPH 2006, Art Gallery
2006	Reviewer, ACM SIGGRAPH 2006, Sketches
2005 – 2008	Advisor, NSF Nanoscale Informal Science Education Network
2005 – 2010	Editorial Board, Journal of Biomedical Discovery and Collaboration
2005	Juror, ACM SIGGRAPH, Art Gallery
2004	Member, Art Gallery Committee, ACM SIGGRAPH 2004
2003	Evaluator, National Endowment for Science, Technology and the Arts, UK

## RESIDENCIES/FELLOWSHIPS

2012	Los Alamos National Laboratory, ISEA/SARC Artist-in-Residence
2005	UCSD Sixth College: Culture, Art and Technology, Innovator-in-Residence
2003	The Program for Media Artists/Rockefeller Foundation Media Arts Fellowship
2002	UCLA School of the Arts & Architecture, Graduate Recognition Award
2002	UCLA School of the Arts & Architecture, Graduate Commencement Speaker
2001	Collegium of University Teaching Fellows, UCLA
2001	Clifton Webb Fine Arts Scholarship, UCLA
2001	Hortense Fishbaugh Scholarship, UCLA
2001	Maddie Katz Adopt-A-Scholar Award, UCLA
2000	Academic Fellowship, UCLA, Graduate Division
1998	Cedars Sinai Health System Leadership and Creativity Award
1996	Ernst & Young National Benchmark, CSHS
1996	Cedars Sinai Health System, President's Award for Excellence

## MEMBERSHIPS

ACM: Association for Computing Machinery / ACM SIGGRAPH

CAA: College Art Association

## MISCELLANEOUS

Bilingual: Spanish

Prior membership: ACHE (American College of Health Care Executives)