

CHRISTINE A. METZGER, PhD

Curriculum Vitae, 1 September 2017

California College of the Arts
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EDUCATION

- 2013 Ph.D., Geological Sciences, University of Oregon, Eugene, Oregon
Dissertation: Paleosol records of Middle Miocene climate change
- 2003 M.S., Geology, Temple University, Philadelphia, Pennsylvania
- 2001 B.S. (Hons.), Geology, Washington and Lee University, Lexington, Virginia

TEACHING & RESEARCH INTERESTS

Geoscience education	Paleopedology (study of ancient soil)
Science in the art and design studio	Paleoclimatology (study of past climate)
Environmental decision making	Paleobotany and paleontology
Data communication	Ecosystem and landscape evolution
Climate change	Middle Miocene thermal maximum

COLLEGE-LEVEL TEACHING

- 2010+ **Assistant Professor**, Critical Studies, California College of the Arts (CCA)
2016-2017 Sabbatical (Fall 2016-Spring 2017)
2015+ MUSE (Mobile Units for Science Exploration) Coordinator
2013-2016 Principal Investigator, *Exploring Science in the Studio* (NSF grant)
- 2008-10 **Assistant Professor**, Whittier College, Environmental Science Program
- 2004-08 **Graduate Teaching Fellow**, University of Oregon, Department of Geological Sciences

RELATED EXPERIENCE

- 2017 **Instructor**, Renewable Energy, Nazerbayev International School, Shymkent, Kazakhstan
- 2016-17 **Curricular Specialist**, Renewable Energy, Johns Hopkins Center for Talented Youth International Program, Saudi Arabia
- 2005-15 **Instructor**, Paleobiology, Johns Hopkins University Center for Talented Youth Summer Program, Los Angeles, California.

RECENT GRANTS, AWARDS, & RESIDENCIES

- 2017 Scholar in Residence, The Seed Box, Linköping University, Linköping, Sweden
- 2017 Playa Summerlake Artists Residency, Summerlake, Oregon (declined)
- 2013-16 National Science Foundation grant: Exploring Science in the Studio (Principal Investigator)

- (\$199,809, Award #1140742)
- 2016 Scientific Delirium Madness 3.0 Residency, Djerassi Resident Artists Program ([link](#))
 - 2016 Humanities and Sciences, sabbatical funds (\$3000)
 - 2015+ Geologist in Residence, CCA Ceramics Program
 - 2014 AAC&U Sustainability Fellowship Award, PKAL Summer Institute (\$3675)
 - 2013 Johns Hopkins University Center for Talented Youth Distinguished Alumni Award ([link](#))
 - 2013 Travel grant, California College of the Arts (\$1500)
 - 2013 Faculty enrichment grant, CCA (\$3000)
 - 2013 Curriculum grant, Art, Science, Sustainability Initiative (with K. Anno, D. Fortescue, L. Grose, and N. Lynch), CCA (\$3000)
 - 2011 Travel grant, CCA (\$2000)
 - 2007 Dunbar Scholarship, University of Oregon (\$10,000)
 - 2006 International Association of Sedimentologists Student Grant (€500)
 - 2006 Australian Academy of Science grant (\$3000AUD)
 - 2006 National Science Foundation East Asia Pacific Summer Institute (\$7500)

/// PUBLICATIONS + PRESENTATIONS

PUBLICATIONS (* denotes peer-reviewed)

- 2017* **Metzger, C.A.**, *Renewable Energy*, King Abdulaziz of Saudi Arabia and his Companions Foundation for Giftedness and Creativity/Mawhiba, Riyadh, Kingdom of Saudi Arabia, 572 p.
- 2017 **Metzger, C.A.**, Exploring Data in Stitches: The California Drought, 1895-2015, *Leonardo*/MIT Press, v. 50, p. 239.
- 2016 **Metzger, C.A.**, Wonder & joy: The shared natural world of scientists, artists, and designers, *Glance*/CCA, p. 28-30.
- 2015 **Metzger, C.A.**, MUSE Units and Uses, in *MUSE: Mobile Units for Scientific Exploration*, California College of the Arts, p. 2-5.
- 2010* **Metzger, C.A.**, and Retallack, G.J., Paleosol record of Neogene climate change in the Australian outback, *Australian Journal of Earth Science*, v. 57, p. 871-885.
- 2006* Retallack, G.J., **Metzger, C.A.**, Greaver, T., Jahren, H.A., Smith, R.M.H., and Sheldon, N.D., Middle-Late Permian mass extinction on land: *Geological Society of America Bulletin*, v. 118, p. 1398-1411.
- 2005* Retallack, G.J., Jahren, A.H., Sheldon, N.D., Chakrabarti, R., **Metzger, C.A.**, and Smith, R.M.H., The Permian-Triassic boundary in Antarctica: *Antarctic Science*, v. 17, p. 241-258.
- 2004* **Metzger, C.A.**, Terry Jr., D.O., and Grandstaff, D.E., Effect of paleosol formation on rare earth element signatures in fossil bone: *Geology*, v. 32, p. 497-500.

PUBLICATIONS SUBMITTED FOR PUBLICATION (* denotes peer-reviewed)

- 2017* **Metzger**, C.A., Paleosol records of Middle Miocene climate change in the Santa Cruz formation, coastal Patagonia, Argentina. Submitted to *Palaeogeography, Palaeoclimatology, Palaeoecology*.
- 2017* **Metzger**, C.A., Cataloging wonder: the art and science of the collection. Submitted to *The STEAM Journal*.
- 2017* Colwyn, D.A., Brandon, M.T., Hren, M.T., Hourigan, J., Pacini, A., Cosgrove, M.G., Midzik, M., Garreaud, R., **Metzger**, C.A., Cenozoic evolution of orogenic topography in the Patagonian Andes. Submitted to *GSA Bulletin*.

RECENT PRESENTATIONS (* denotes peer-reviewed)

- 2017* Auerbach, D., Brandon, M.T., Hren, M.T., Hourigan, J.K., Pacini, A., Cosgrove, M., Midzik, M., Garreaud, R. and **Metzger**, C.A., New Evidence for long-lived Cenozoic topography in the Patagonian Andes, Geological Society of America Annual Meeting, Denver, Colorado. 25 October 2017.
- 2017 **Metzger**, C.A., Exploring Science in the Studio / Bringing the Studio into the Lab. *Invited lecture*. The Seed Box/Linköping University, Sweden. 21 March 2017.
- 2017* **Metzger**, C.A., Global extent of Aridisols and other climatically significant soils at the Middle Miocene Thermal Maximum (~16 Ma), International Symposium on Eolian Dynamics, Paleosols, and Environmental Change in Drylands, Fuerteventura, Spain. 13 March 2017.
- 2016 **Metzger**, C.A., The Science of Indigo Dyeing and the Art of Shibori Resists. *Invited presentation and workshop*. Guerrilla Science. Symbiosis Gathering, Woodward Reservoir, California. 23 September 2016.
- 2016* **Metzger**, C.A., Exploring Science in the [Art + Design] Studio: Mobile Units for Scientific Exploration, Envisioning the Future of Undergraduate STEM Education: Research and Practice Conference, Washington, D.C. 27-29 April 2016.
- 2016 Angelo, K., **Metzger**, C.A., Miller, M., and Jonas, L. Exploring Science in the Studio Symposium: Successes, Missed Opportunities, and Lessons Learned. Presentation to Senior Cabinet, California College of the Arts. 14 January 2016.
- 2015* **Metzger**, C.A., Exploring Science in the Studio: NSF-Funded Initiatives to Increase Scientific Literacy in Undergraduate Art and Design Students, American Geophysical Union Annual Meeting, San Francisco, California. 14-18 December 2015.
- 2015 **Metzger**, C.A., Let's Destroy the Hollywood Sign: Pseudoscience in Disaster Movies. *Invited lecture*. Leonardo Art Science Evening Rendezvous (LASER), Stanford University, Palo Alto, California. 10 December 2015.
- 2015 **Metzger**, C.A., The pedagogy of weather and climate. *Invited panelist and content area expert*. Simons Project Middle School Science Workshop, Johns Hopkins Center for Talented Youth, Baltimore, Maryland. 20-21 November 2015.
- 2015 **Metzger**, C.A., Let's Destroy the Hollywood Sign: Pseudoscience in Disaster Movies. *Invited*

- lecture*. Leonardo Art Science Evening Rendezvous (LASER), University of California, Berkeley, California. 14 November 2015.
- 2015 **Metzger**, C.A., Sustainability Minor at California College of the Arts, Sustainability in the Classroom panel, AICAD Exploring Science in the Studio Symposium, San Francisco, California. 7 November 2015.
- 2015 **Metzger**, C.A., Baldon, R., Wexler, A., and Dowling, T., Exploring Science in the Studio, AICAD Exploring Science in the Studio Symposium, San Francisco, California. 6 November 2015.
- 2015 **Metzger**, C.A., Lights, Camera,...Fiction?: Bad science at the movies. *Invited lecture*. Leonardo Art Science Evening Rendezvous (LASER), University of San Francisco, San Francisco, California. 9 March 2015.
- 2014 **Metzger**, C.A., Wet worlds, warm worlds, dry worlds. "Aqua Vita: Life in, on, and by the water" panel. *Invited panelist*. In-Solution, Art, Science, and Activism Symposium, ME-DI-ATE Soundwave Festival, San Francisco, California. 27 September 2014.
- 2014 **Metzger**, C.A., Intersections of Art and Science at CCA: Exploring Science in the Studio and other initiatives, Annual Parents of CCA Tea, San Francisco, California. 5 April 2014.
- 2014 **Metzger**, C.A., Best practices for the highly able student. *Invited panel speaker and pedagogy expert*. Center for Talented Youth Sarah D. Barder Fellowship conference, Santa Monica, California. 21-22 March 2014.
- 2013* **Metzger**, C.A., Miocene Soil Database: Global paleosol and climate maps of the Middle Miocene Thermal Maximum, American Geophysical Union Annual Meeting, San Francisco, California. 9-13 December 2013.
- 2013 **Metzger**, C.A., Intersections of Art and Science at CCA: Exploring Science in the Studio and other initiatives. *Invited talk*. Board of Trustees Meeting, California College of the Arts. 19 November 2013.
- 2013* **Metzger**, C.A., Paleosol records of Middle Miocene climate change in the Santa Cruz formation: A paleo-analog for future climate change?, Geological Society of America Annual Meeting, Denver, Colorado. 27-30 October 2013.
- 2009* **Metzger**, C.A., Lights! Camera! ...Fiction?: Using Hollywood films to teach Earth and environmental science in an undergraduate science-in-context course, Geological Society of America Annual Meeting, Portland, Oregon. 18-21 October 2009.

RECENT PRESENTATIONS OF OTHER WORK

- 2016 "Road Trip Map," *Faultlines* exhibition, CCA. 1 December 2016.
- 2016 "California Drought: 1895-2015," Annual Djerassi Resident Artist Program Open House, Woodside, CA. 24 July 2016.
- 2016 "Terra Sigillata (#scienceinthestudio)," ICE BOX Gallery, Treadwell Hall, CCA. Installation of interdisciplinary collaboration with Kari Marboe and Nancy Selvin and their students. 14-28 March 2016.
- 2015 "Hexagons in Nature," MUSE Exhibit Space, Simpson Library, CCA. Fall 2015.

INVITED LECTURES & PRESENTATIONS at CCA

- 2017 Title TBA (Science of Cotton), Invited lecture, The Ecology of Clothing (Lynda Grose, Fashion/SCIMA, CCA), date TBA
- 2016 'I love clay.' 'Ditto.': Ceramics, geology, and clay, Invited lecture, Inside of Outside (Nancy Selvin, Ceramics, CCA)
- 2014 Filling in the gaps: geology, holes, & incompleteness, Invited lecture as Geologist in Residence of the Ceramics program, CCA
- 2013 The Nine Environmental Limits and the Scientific Method, Invited lecture, Fashion Design 3: Sustainability Studio (Lynda Grose, Fashion, CCA)
- 2012 Water Footprints: Cotton and other textiles, Invited lecture, Local Fiber Incubator studio (Lynda Grose and Mimi Robinson, Fashion, CCA)
- 2012 Why dirt goes downhill: soil stability, erosion, and mass wasting, Invited lecture, Architecture Studio 2 (Mark Donohue, Lisa Findley, Architecture, CCA)
- 2011 Water Footprints: The hidden water in what we buy, eat, drink, and make, Invited lecture, Water Works courses, CCA
Poetry (Joseph Lease, Writing & Literature, CCA), 3 October 2011
Fashion Design 3: Sustainability Studio (Lynda Grose, Fashion, CCA), 3 October 2011
Water Infrastructure (Katherine Rinne, Architecture, CCA), 26 September 2011
How Water Flows (Kim Anno, Painting/UDIST, CCA), 13 September 2011
- 2010 Water Footprints: The hidden water in what we buy, eat, drink, and make, Fashion Design 3: Sustainability Studio (Lynda Grose, Fashion, CCA), 1 October 2010
- 2010 The pirate Atchafalaya vs. the mighty Mississippi, Urban Riparian Ecologies (David Fletcher, Architecture, CCA), 11 October 2010
- 2010 Hydrology and flooding, Urban Riparian Ecologies (David Fletcher, Architecture, CCA), 20 September 2010

SELECTED PRESS AND OTHER MENTIONS

- 2015 "CCA Hosts 2015 AICAD Symposium: Exploring Science in the Studio November 5-7" by Chris Bliss, CCA webpage ([link](#))
- 2014 "Christine Metzger: This Ain't CSI" by Lindsey Westbrook, *Glance* magazine, p. 30-31. ([link](#))
- 2013 "College Receives \$200,000 National Science Foundation Grant" by Chris Bliss, CCA webpage ([link](#))
- 2013 "From 'Bad Science at the Movies' to 'Waste Land'" by Rachel Walther, CCA webpage ([link](#))
- 2013 "Case studies: California College of the Arts + Climate Change" by RISD STEM-to-STEAM webpage ([link](#))
- 2012 "CCA Attends COP17 Environmental Conference in South Africa" by Allison Byers ([link](#))

- 2012 "CTY wins Telly Award for online video featuring summer courses" by Matt Bowden ([link](#))
- 2012 "Awesome CTYers: Creative teaching, dynamic learning" by Maria Blackburn (p. 10, [link](#); [link](#))
- 2011 "Water Works: Science-Infused Courses Underscore Sustainable Design, Artistic Expression" by Jim Norrena ([link](#))
- 2011 "Art and climate change: Christine Metzger" by Climate Change TV/Responding to Climate Change ([link](#))
- 2011 "Love of Learning" by Matt Bowden/CTY Communications, 30 September ([link](#))
- 2011 "A home: Johns Hopkins CTY" by Matt Bowden/CTY Communications, 29 October ([link](#))

///ADVISING + MENTORING

INVITED GUEST CRITIC & COURSE SCIENCE ADVISING

- 2016 Faultlines (Donald Prothero and Russell Baldon, Grad Design) field trip, November 2016
- 2016 Lecture, demonstration, and collaborative installation with Kari Marboe, Nancy Selvin, and their 3D Core and Ceramics classes. 14 March 2016
- 2010-15 Exploring Science-in-the-Studio course science advising
- 2015 BioWerks (Tom McKeag, CCA Industrial Design), 11 December 2015
- 2015 Buoyant Ecologies (Adam Marcus, CCA Architecture), 18 November 2015
- 2015 Many Holes in a Line (Kari Marboe & Megan Werner, CCA Ceramics), 16 October 2015
- 2015 BioDesign (Mike Bogan, CCA Architecture), 8 May 2015
- 2015 Production Furniture (Russel Baldon, CCA Furniture and Allan Wexler, Parsons), multiple dates
- 2014 Water Infrastructure (Katherine Rinne, CCA Architecture), 17 October 2014
- 2014 3D Topic Studio (Paul Montgomery, CCA Grad Design), multiple dates
- 2013 Fashion Design 3: Sustainability Studio (Lynda Grose, CCA Fashion), 26 February 2013
- 2011 Water Infrastructure (Katherine Rinne, CCA Architecture), 19 September, October 17, 31 2011
- 2010 Fashion Design 3: Sustainability Studio (Lynda Grose, CCA Fashion), 22 October 2010
- 2010 Urban Riparian Ecologies (David Fletcher, CCA Architecture), 11 October 2010

STUDENT MENTORING

- 2015 Pranavi Chopra, Graphic Design major, climate change, greenhouse skepticism
- 2015 Nicole Enos, Graphic Design major, climate change, greenhouse skepticism
- 2015 Taylor Koedyker, Metal Arts major, California's state gemstone benitoite
- 2015 Kelsey Bowen, Ceramics major, hand dug clay sources and safety
- 2015 Miranda Robbins, Mills College MFA student, Marin Headlands geology
- 2014 Ekta Shah, CCA MFA student, soil colors and Munsell Soil Color Guide
- 2014 Vanina Howan, Fashion Major, senior collection, environmental issues
- 2014 Wing and Ken Soh, Illustration majors, fossils and paleontology
- 2014 Amy Bell, Illustration major, senior thesis, water, drought, karst

- 2014 Iris Hsu, Industrial Design major, composting
- 2013 Summer Pinyuan, Industrial Design major, sewing machines
- 2013 Nicole Fraser-Herron, Photography major, poison ivy as a photographic pigment, safety
- 2013 Tatiana Butterworth and Nicholas Morris, Ceramics course, bricks and soil properties
- 2013 Carla Oster, Fashion major, senior thesis project
- 2013 Jenna Trost, Illustration major, the Wallace Line and biologic speciation
- 2012 Kurt Fausset, Architecture major, Sutro Baths and erosion
- 2011 Mary Sek, Architecture major, geological maps
- 2010 Tobi Adamolekun, Architecture major, earthen structures and soil properties
- 2010 Annie McCourt, Fashion major, water cycle and fabrics

///COLLEGE SERVICE + ENGAGEMENT

COLLEGE-WIDE SERVICE

- 2013-15 Core Committee, AICAD Exploring Science in the Studio Symposium Steering Committee
- 2015+ Various campus planning meetings, CCA
- 2014 Industrial Design tenure track search committee (failed search)
- 2014 Electronics and Programming ranked-non tenure search committee (hired Michael Shiloh)
- 2010+ President's Steering Committee on Sustainability
- 2010+ Science Advisor: Science in the Studio courses
- 2011-13 Executive Committee of the Faculty Senate
- 2011-13 Humanities and Sciences Undergraduate Curriculum Committee
- 2011-13 Science Curriculum Coordinator

SUSTAINABILITY INITIATIVES AND ACTIVITIES

- 2015 Sustainability in the Classroom Panel presenter, AICAD 2015 Symposium
- 2015+ Environmental studies minor initiative, CCA
- 2014 College representative, STEAM Connect conference, San Diego, CA
- 2014 Art, Science, and Sustainability Initiative, Workshop + courses, CCA
- 2013 PALS (Partnership for Academic Leadership on Sustainability) Fellow
- 2012 Sustainability Workshop, International and transfer student orientation, CCA
- 2012 Faculty Retreat, Sustainability session convener, CCA
- 2011 College representative and official observer, United Nations Climate Change Conference COP17, Durban, South Africa
- 2010+ President's Sustainability Steering Committee, Faculty Member CCA
- 2010 Undergraduate advisor, Environmental Science major, Whittier College
- 2009 Lecture series convener, Environmental Science Colloquium, Whittier College

///PROFESSIONAL ENGAGEMENT

OTHER PROFESSIONAL ENGAGEMENT & SERVICE

- 2017 Proposal Reviewer, Scientific Delirium Madness 5.0 residency applications, Djerassi Resident Artists Program
- 2017 Proposal Reviewer, AAC&U 2016 Transforming Undergraduate STEM Education conference
- 2016 Proposal Reviewer, *SALT: Scientists and Artists Learning Together* (Westminster College), W.M. Keck Foundation
- 2016 Proposal Reviewer, AAC&U 2016 Transforming Undergraduate STEM Education conference
- 2012+ Johns Hopkins Center for Talented Youth representative for Scholar Search, California
- 2008+ Course mentor for Paleobiology, Johns Hopkins Center for Talented Youth

PROFESSIONAL DEVELOPMENT & WORKSHOPS

- 2017 Reader, *Advanced Placement Environmental Science Exam*, Cincinnati, OH. 1-9 June 2017.
- 2017 Presenter and participant, *International Symposium on Eolian Dynamics, Paleosols, and Environmental Change in Drylands*, Fuerteventura, Spain. 13-16 March 2017.
- 2016 Presenter and participant, *Envisioning the Future of Undergraduate STEM Education: Research and Practice Conference*, National Science Foundation, 27-29 April 2016, Washington, DC.
- 2015 Moderator, Space + Place Panel, AICAD Exploring Science in the Studio Symposium, San Francisco, California. 6 November 2015.
- 2013 Presenter and participant, *Partnership for Academic Leadership on Sustainability (PALS) conference*, OTIS School of Art and Design, 2-5 October 2013.
- 2013 Convener and presenter, *CCA Art, Science, and the Environment Initiative Retreat*, Muir Beach, CA, 29 June 2013.
- 2009 Participant (CEU 1.6), *Introduction to Geographic Information Systems (GIS) using ArcGIS for geological and environmental science applications*, Geological Society of America Annual Meeting, Portland, Oregon.
- 2009 Participant, *Teaching About Energy in Geoscience Courses: Current Research and Pedagogy*, On the Cutting Edge - Professional Development for Geoscience Faculty, University of Wyoming, Laramie, Wyoming, 17-20 May 2009.
- 2009 Participant, *Early Career Geoscience Faculty: Teaching, Research, and Managing Your Career*, On the Cutting Edge - Professional Development for Geoscience Faculty, College of William and Mary, Williamsburg, Virginia, 14-19 June 2009.

PROFESSIONAL SOCIETIES

- 2007+ American Geophysical Union
- 1998+ Geological Society of America (CCA Campus representative)