

## Dr. Stefani A. Crabtree, Ph.D.

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### **CONTACT INFORMATION**

The Santa Fe Institute  
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Santa Fe, NM 87501

[www.stefanicrabtree.com](http://www.stefanicrabtree.com)

### **RESEARCH INTERESTS**

*Computational social science; food webs; coupled human-natural systems; human dimensions of climate change; complex adaptive systems; network science (methods, theories, applications); agent-based modeling; the archaeology of the American Southwest, southern France and Mongolia; ethnoarchaeology aboriginal Australia.*

### **APPOINTMENTS**

#### *Current*

- Assistant Professor in Social-Environmental Modeling, Department of Environment and Society, College of Natural Resources, Utah State University
- ASU-SFI Center for Biosocial Complex Systems Fellow, The Santa Fe Institute (January 2019-August 2022)
- Research Associate, Crow Canyon Archaeological Center (March 2018-present)
- Fellow, Centre de Recherches Interdisciplinaires (January 2018-present)
- Co-director, NOMAD Science Mongolia (June 2012-present)

#### *past*

- Post-doctoral scholar, The Pennsylvania State University (January 2017-December 2018)
- Researcher, Laboratory for Social Minds, Indiana University (2016)
- Research Fellow, Department of Anthropology, Washington State University (2009-2015)
- Teaching Fellow, Department of Anthropology, Washington State University (2012-2016)
- Archaeologist, Cultural Resource Consultants (2010)
- Archaeologist and Crew Chief, SWCA Environmental Consultants (2008-2009)
- Archaeologist and Crew Chief, Cultural Resource Analysts, Inc. (2007-2008)
- Assistant to the Executive Director, Urgent Action Fund (2006-2007)

### **EDUCATION**

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|-------|---|
| Ph.D. | Archéologie, Territoires, Environnement Université Bourgogne Franche-Comté, Besançon, Franche-Comté, France. February, 2017 |
| Ph.D. | Department of Anthropology, Washington State University, Pullman, WA. December, 2016  |
| M.A.  | Department of Anthropology, Washington State University, Pullman WA. 2012   |

B.A. Department of Anthropology, Scripps College, Claremont, CA. *Minor: French*.  
2004

**PUBLICATIONS** Citations: 167; H-index: 7; i10-index: 4

*\*Indicates corresponding author*

**Articles Under Review or in Advance Preparation**

In review Vella, Anthea, Ian Moffat\*, Julia K. Clark, J., Jamsranjav Bayarsaikhan, David Putnam, Bayaana Chinbold, **Stefani A. Crabtree**, and Camilla Sturm.  
“Geophysical Investigation of the Soyo Archaeological Site, Northern Mongolia.”  
Submitted to. *Archaeological Prospection*. 2018.

**Peer-reviewed journal articles**

*In press* **Crabtree, Stefani A.\***, Benjamin Davies, Iza Romanowska, Kathryn Harris.  
“Using Agent-based models in archaeological outreach: Why model? How to model? When to use a model? A step-by-step guide (Part III of III).” Submitted to *Advances in Archaeological Practice*. 2018.

*In press* Romanowska, Iza\*, **Stefani A. Crabtree**, Benjamin Davies, Kathryn Harris.  
“Agent-based Modeling for Archaeologists. Why model? How to model? When to use a model? A step-by-step guide (Part I of III).” Submitted to *Advances in Archaeological Practice*. 2017.

*In press* Benjamin Davies\*, Romanowska, Iza, **Stefani A. Crabtree**, Kathryn Harris  
“Combining Geographic Information Systems and Agent-Based Models in Archaeology: Part II in: Why model? How to model? When to use a model? A step-by-step guide (Part II of III).” Submitted to *Advances in Archaeological Practice*. 2018.

*In press* **Crabtree, Stefani A.\***, and Lewis Borck. Social Network Analysis in Archaeology. *Encyclopedia of Global Archaeology*. C. Smith (Ed.) Springer, NY 2019 Edition. 2019.

2019 **Crabtree, Stefani A.\***, Douglas W. Bird, Rebecca Bliege Bird. “Subsistence Transitions and the Simplification of Ecological Networks in Western Australia.” *Human Ecology*. 2019. <https://doi.org/10.1007/s1074>

2018 (authors alphabetical) Moritz, Mark\*, Roy Behnke, Christine Beitzl, Rebecca Bliege Bird, Rafael Chiaravalloti, Julia K. Clark, **Stefani A. Crabtree**, Sean Downey, Ian M. Hamilton, Sui Chian Phang, Paul Scholte, James Wilson (Authors alphabetical after first author). *Emergent Sustainability in Open Property Regimes*. *PNAS* 115(51)12859-12867.

- 2017 **Crabtree, Stefani A.\***, Lydia J. S. Vaughn, Nathan T. Crabtree  
“Reconstructing Ancestral Pueblo food webs in the southwestern United States.”  
*Journal of Archaeological Science*, 81:116-127.
- 2017 **Crabtree, Stefani A.**, R. Kyle Bocinsky, Paul L. Hooper, Susan C. Ryan, and  
Timothy A. Kohler\*. “How to Make a Polity (in the Central Mesa Verde  
Region).” *American Antiquity*, 82(1), 71-95.
- 2016 D’alpoim Guedes, Jade\*, **Stefani A. Crabtree**, R. Kyle Bocinsky, Timothy A.  
Kohler “21<sup>st</sup> Century Approaches to Ancient Problems: Climate and Society.”  
*Proceedings of the National Academy of Sciences*, 113(51), 14483-14491; doi:  
10.1073/pnas.1616188113.
- 2016 **Crabtree, Stefani A.\***, and Benjamin A. Bellorado “Using Cross-Media  
Approaches to Understand Invisible Industry: How Cotton Production Influenced  
Pottery Designs and Kiva Murals in Cedar Mesa.” *Kiva*, 82(2), 174-200.
- 2016 **Crabtree, Stefani A.\*** “Simulating Littoral Trade: Modeling the trade of wine  
in the Bronze to Iron Age transition in Southern France.” *Land* **2016**, 5(1), 5;  
doi:10.3390/land5010005.
- 2015 Clark, Julia K., **Stefani A. Crabtree\*** “Examining Social Adaptations in a  
Volatile Landscape in Northern Mongolia Via the Agent-Based Model Ger  
Grouper.” *Land* **2015**, 4(1), 157-181; doi:10.3390/land4010157.
- 2015 **Crabtree, Stefani A.\*** “Inferring Ancestral Pueblo Social Networks from  
Simulation in the Central Mesa Verde” *Journal of Archaeological Method and Theory*:  
Volume 22, Issue 1 (2015), Page 144-181. DOI 10.1007/s10816-014-9233-8
- 2013 Cockburn, Denton, **Stefani A. Crabtree\***, Timothy A. Kohler, R. Kyle  
Bocinsky “Simulating Social and Economic Specialization in Small-scale  
Agricultural Societies.” *Journal of Artificial Societies and Social Simulation*. Vol 16(5).
- 2013 **Crabtree, Stefani A.\*** and Ludovic Malécot “The Solitary Goddess: Evidence  
of Roman and Gaulish syncretism in the *Déesse de l’Abondance* of Rom, France.” *The  
European Archaeologist*. Vol 39, p. 7-14.
- 2012 **Crabtree, Stefani A.\*** and Timothy A. Kohler “Modeling Across Millennia:  
Interdisciplinary Paths to Ancient Socio-natural Systems” in special issue  
Modeling Across Millennia: Interdisciplinary Paths to Ancient Socio-natural  
Systems. *Ecological Modelling*. Vol 241, p. 2-4.
- 2012 Timothy A. Kohler\*, R. Kyle Bocinsky, Denton Cockburn, **Stefani A.  
Crabtree**, Mark Varien, Ken Kolm, Schaun Smith, Scott Ortman, and Ziad  
Kobti “Modelling Prehispanic Societies in their Ecosystems” in special issue

Modeling Across Millennia: Interdisciplinary Paths to Ancient Socio-natural Systems. *Ecological Modelling*. Vol 241, p. 30-41.

### Peer reviewed Book chapters

- Submitted Dugmore, Andrew, Rowan Jackson, David Cooper, **Stefani Crabtree**, George Hambrecht, Megan Hicks, Viðar Hreinsson, Árni Daníel Júlíusson, Anthony Newton, Richard Streeter and Tom McGovern. “Abrupt *versus* slowly unfolding catastrophes- when the pace of change might help coping strategies, but does not.” *In Archaeological Perspectives of Catastrophes in Context*, Felix Reide and Payson Sheets, Editors. Berghan Books.
- 2018 Kohler, Timothy A., **Stefani A. Crabtree**, R. Kyle Bocinsky and Paul Hooper “Sociopolitical Evolution in Midrange Societies: The Prehispanic Pueblo Case.” *In The Emergence of Premodern States: New Perspectives on the Development of Complex Societies*. Sabloff, JA and Sabloff, PLW, Editors. SFI Press, Santa Fe, NM.
- 2018 Laure Nuninger, Pierre Garmy, Thérèse Libourel, **Stefani A. Crabtree**, Jean-Luc Fiches, Jacques Ferber. Modéliser les mutations territoriales de l'Âge du Fer dans le midi de la Gaule (VIe-Ve siècles av. J.-C.). *Peupler la Terre: De la préhistoire à l'ère des métropoles*. Presses Universitaires François Rabelais ; Paris, France.
- 2018 Timothy A. Kohler, **Stefani A. Crabtree**. « Village and Polity Formation in Pueblo Societies: How Population Growth Channels Social Processes in Neolithic Societies ». *Peupler la Terre: De la préhistoire à l'ère des métropoles*. Presses Universitaires François Rabelais ; Paris, France.
- 2018 Nuninger, Laure, Lena Sanders, Timothy A. Kohler, **Stefani A. Crabtree** et al. Un cadre conceptuel générique pour décrire des transitions dans les systèmes de peuplement - Application à un corpus de douze transitions entre 70000 BP et 2050. *Peupler la Terre: De la préhistoire à l'ère des métropoles*. Presses Universitaires François Rabelais ; Paris, France.
- 2012 Kohler, Timothy A., R. Kyle Bocinsky, **Stefani A. Crabtree** and Ben Ford. *Exercising the Model: Settlement Efficiency and Changes in Locational Practice, in Emergence and Collapse of Early Villages: Models of Central Mesa Verde Archaeology*. Cal Press. p. 153-164.

### Other publications and works

- 2018 **Crabtree, Stefani A.** *American Antiquity*. Review of: Connected Communities: Networks, Identity, and Social Change in the Ancient Cibola World. MATTHEW A. PEEPLES. 2018. The University of Arizona Press, Tucson. vii + 276 pp. (hardback).
- 2017 **Crabtree, Stefani A.** *Journal of Artificial Societies and Social Simulation*. Review of: Simulating Prehistoric and Ancient Worlds (Computational Social Sciences), Barceló, Juan A. and Castillo, Florencia Del (eds.). Springer-Verlag: Berlin. Vol 20(20):2017. <http://jasss.soc.surrey.ac.uk/20/2/reviews/2.html>
- 2012 **Crabtree, Stefani A** and Timothy A. Kohler *editors* Modeling Across Millennia: Interdisciplinary Paths to Ancient Socio-natural Systems. *Ecological Modelling*. August, 2012. Vol 241.
- 2009 **Crabtree, Stefani** *Healing Secrets of the South Pacific: An anthropologist discovers Samoan tinctures you can sample right at home*. March, "Natural Health Magazine", pp.89-90.
- 2008 SWCA Environmental Associates. *A Class III Cultural Resource Inventory for the Ryan Gulch 3-D Geophysical Exploration Project, Rio Blanco County, Colorado*. November, 2008.
- 2005 **Crabtree, Stefani** *Medicinal Matriarchs: Women and Traditional Medicine in Oceania and Asia*. Thomas J. Watson Foundation Final Report.

## TEACHING EXPERIENCE, INSTRUCTOR OF RECORD

- Spring 2019: Complexity and the Evolution of Societies, The Santa Fe Institute and Arizona State University, Core Course for the Masters in Complexity Science.
- Summer 2018: Modeling Past Human Societies, The Santa Fe Institute Complex Systems Summer School
- Spring 2018: Introduction to Agent-Based Modeling, The Pennsylvania State University
- Spring 2017: Agent-based modeling, an introduction. A 2-day workshop at the Computer Approaches in Archaeology Conference. Atlanta, GA.
- Fall 2016: Anthropology 130: Great Discoveries in Archaeology, Washington State University
- Anthropology 330: The Origins of Civilization, Washington State University
- Spring 2016: Anthropology 201: Art and Society, Washington State University
- Spring 2016: Agent-based modeling, an introduction. A 2-day workshop at the Computer Approaches in Archaeology Conference. Oslo.
- Fall 2015: Anthropology 201: Art and Society, Washington State University
- Summer 2015 Anthropology 201: Art and Society, Washington State University
- Spring 2015 Anthropology 130: Great Discoveries in Archaeology, Washington State University

- Summer 2013: Simulation multi-agents. A 3-day workshop at the Université de Franche-Comté, France.
- Spring 2013 Anthropology 101: General Anthropology (A Four Fields Approach), Washington State University
- Fall 2012 Anthropology 101: General Anthropology (A Four Fields Approach), Washington State University

### **INVITED SYMPOSIA & PLENARY**

- 2019 Keynote. Socio-Environmental Dynamics over the Last 15,000 Years: The Creation of Landscapes. Kiel University, Germany, March 10.
- 2019 National Socio Environmental Synthesis Center. Annapolis, MD, February 11.
- 2018 Plenary. The Great Basin Anthropological Conference, Salt Lake City, U.K. November 8.
- 2018 Plenary. The Computational Approaches in Archaeology Conference, Edinburgh, U.K. October 26.
- 2018 InterPlanetary Festival, Santa Fe Institute. July 7. Santa Fe, NM.
- 2018 Harvard University Center for the Environment, Cambridge MA. "Reconstructing Food Webs from Archaeological Sites." July 30.
- 2018 Center on Social Dynamics and Policy, Brookings Institution, Washington DC. "Agent-based modeling to understand the past and future." April 10.
- 2018 Colorado State University, Fort Collins, CO. "How Environmental Interactions Shaped Ancestral Pueblo Social Dynamics." February 23.
- 2018 Michigan State University, East Lansing, MI. "How Environmental Interactions Shape Social Dynamics in Archaeological Systems." February 15.
- 2017 The University of Maryland, College Park, MD. "Examining Human Impacts on Complex Networks." December 13.
- 2017 The Santa Fe Institute, Santa Fe, NM. "How Complex Adaptive Systems Approaches shed light on the depopulation of Mesa Verde." October 25.
- 2017 The Pennsylvania State University, University Park, PA. "Reconstructing Ancestral Pueblo food webs in the southwestern United States." January 20.
- 2015 San Diego State University, San Diego, CA. "Cascading Effects and Social Consequences: Food webs in the Ancestral Pueblo Southwest." November 15.

- 2015 Washington University in St. Louis, MO. “Examining Ancestral Pueblo Trophic Networks.” August 28.
- 2014 Pitzer College, Claremont, CA. “Ethnography, Archaeology and Adventure in Mongolia.” May 2.
- 2014 University of Southampton, Southampton, U.K. “A Tale of Two Villages, or, How Food Exchange Led to Aggregation in the American Southwest.” January 21.
- 2014 University of Cambridge, Cambridge, U.K. “Aggregation and Simulation in the American Southwest.” January 17.
- 2013 Université de Franche-Comté, Besançon. “Introduction à la modélisation multi-agent dans Netlogo.” May 29.

## CONFERENCE ACTIVITY

### Podium and Poster

- 2018 **Crabtree, Stefani A.**, Rebecca Bliege Bird. Examining Environmental Resilience Through Coupled Human-Natural Systems: A Case from Western Australia. Paper in symposium at 117<sup>th</sup> annual meeting of the American Anthropological Association. San Jose, CA.
- 2018 Rosenfield, Kevin A., **Stefani A. Crabtree**, Mary K. Shenk, Mark Shriver, Julie White, James P. Higham, Nina Jablonski, David A. Puts. The evolution of fertility signals in primates: An agent-based modeling approach. Paper in symposium at 8<sup>th</sup> annual meeting of the European Society for the study of Human Evolution. Faro, Portugal. September 14.
- 2018 **Crabtree, Stefani A.**, Rebecca Bliege Bird. Using Food Web Models to Examine Desert Networks in the American Southwest and Western Australia. Paper in symposium at 84<sup>th</sup> Annual Society for American Archaeology Meetings. Washington, DC. April 12.
- 2017 Bliege Bird, Rebecca, **Stefani A. Crabtree**. We make Country, and Country makes us: Australian Aboriginal women as architects of social and ecological networks. Paper in symposium at 116<sup>th</sup> annual meeting of the American Anthropological Association. Washington, DC. December 1.
- 2017 **Crabtree, Stefani A.**, Timothy A. Kohler. Modeling Polity Growth among Ancestral Pueblo People in Mesa Verde. Paper in symposium at 83<sup>rd</sup> Annual Society for American Archaeology Meetings. Vancouver, BC. March 30.

- 2017 **Crabtree, Stefani A.** Agent-based models of Hierarchy. Paper in symposium at 45<sup>th</sup> Annual Computation Approaches and Quantitative Methods in Archaeology International Conference. Atlanta, GA. March 14.
- 2017 **Crabtree, Stefani A.** Analyzing Trophic Networks Among the Ancestral Pueblo. Paper in symposium at 45<sup>th</sup> Annual Computation Approaches and Quantitative Methods in Archaeology International Conference. Atlanta, GA. March 15.
- 2016 **Crabtree, Stefani A.** Agent-based modeling and complexity science: the next steps in Archaeological Theory? Paper in symposium at 44<sup>th</sup> Annual Computation Approaches and Quantitative Methods in Archaeology International Conference. Oslo, Norway, March 30.
- 2015 **Crabtree, Stefani A.** Assessing Network Connectance with the Assistance of Ethnography, Archaeology and Agent-Based Modeling. Paper in symposium at 114<sup>th</sup> Annual Society for the American Anthropological Association Meetings. Denver, CO., November 16.
- 2015 **Crabtree, Stefani A.** Understanding Vulnerability and Resilience Through Archaeological Foodwebs. Paper in symposium at Conference on Complex Systems '15. Phoenix, AZ., September 28.
- 2015 **Crabtree, Stefani A.,** Simon DeDeo. How Human Perception of the Environment Influences the Abandonment Process. Paper in Ignite at Conference on Complex Systems '15. Phoenix, AZ., September 28.
- 2015 **Crabtree, Stefani A.,** R. Kyle Bocinsky, Timothy A. Kohler. Hierarchy and Tribute Flow in the American Southwest. Paper in symposium at 80<sup>th</sup> Annual Society for American Archaeology Meetings. San Francisco, CA, April 16.
- 2015 Kohler, Timothy A., R. Kyle Bocinsky, **Stefani A. Crabtree.** The Effects of Temporal Coarse Graining on Inferred Patterns of Human Movement. Paper in symposium at 80<sup>th</sup> Annual Society for American Archaeology Meetings. San Francisco, CA, April 18.
- 2014 **Crabtree, Stefani A.,** R. Kyle Bocinsky, Timothy A. Kohler. Modeling Emergency of Complex Groups on Realistic Landscapes. Principles of Complexity: Life, Scales, and Civilization III, August 2014. Santa Fe Institute, Santa Fe, NM, August 25.
- 2014 **Crabtree, Stefani A.,** Nathan T. Crabtree and Lydia Smith. Food Webs in the Ancestral Pueblo Southwest. Global Human Ecodynamics Alliance Modeling. Working Group, Santa Fe Institute, Santa Fe, NM, May 30.
- 2014 Kohler, Timothy A., **Stefani A. Crabtree,** R. Kyle Bocinsky. Emergence of Leadership in Pueblo Societies: Evolutionary Public Goods Games and Corporate



- Group Conflict in Agent-Based Models. Global Human Ecodynamics Alliance Modeling. Working Group, Santa Fe Institute, Santa Fe, NM, May 31.
- 2014 **Crabtree, Stefani A.**, Timothy A. Kohler and R. Kyle Bocinsky. The Development of Social Groups, Leadership and Inequality in the Central Mesa Verde. Paper in symposium at 79<sup>th</sup> Annual Society for American Archaeology Meetings. Austin, TX, April 26.
- 2014 Harris, Kathryn, **Stefani A. Crabtree** and William Andrefsky. The Multifunctional Lives of Points and Flakes. 79<sup>th</sup> Annual Society for American Archaeology Meetings. Austin, TX, April 25.
- 2014 Timothy A. Kohler, Kelsey Reese, **Stefani A. Crabtree**, and R. Kyle Bocinsky. Prolegomenon: VEP II, Almost in Retrospect. Paper in symposium at 79<sup>th</sup> Annual Society for American Archaeology Meetings. Austin, TX, April 26.
- 2014 **Crabtree, Stefani.** Modélisation multi-agent d'un réseau d'échanges. TransMonDyn. Lyon, France, January 19.
- 2013 Kohler, Tim A., R. Kyle Bocinsky, **Stefani A. Crabtree**, Andrew Hlynka, Lokesh Patil, Paul Lovell Hooper, Ziad Kobti. Leadership, Territoriality and Conflict in an Agentized Pueblo World in Complex-Systems Approaches to Long-Term Change. Paper in symposium at 112<sup>th</sup> Annual American Anthropological Association. Chicago, IL, November 21.
- 2013 **Crabtree, Stefani.** Interactions des spheres culturelles étrusques, grecques et gauloises entre l'âge du bronze et l'âge du fer dans le sud de la France: modélisation multi-agent d'un réseau d'échanges. Journée des doctorants en archéologie de l'Université de Franche-Comté. Besançon, France, November 10.
- 2013 **Crabtree, Stefani**, Julia K. Clark. Ger Grouper: Examining Social Interactions to a Volatile Environment in Northern Mongolia, Paper in symposium at Complex Systems in Prehistoric Research Satellite Workshop. European Conference on Complex Systems, ECCS'13. Barcelona, Spain, September 19.
- 2013 **Crabtree, Stefani.** Exchange, Alliances and Aggregation in the Village Ecodynamics Project. Presented at the 2013 Village Ecodynamics Project Presentation and Discussion of Preliminary Results. Crow Canyon, Cortez, CO, July 29.
- 2013 Kohler, Tim, **Stefani Crabtree**, Michael Berry. The Secrets of the Southwest Solved by Walkative Tree Rings. Paper in symposium at 78<sup>th</sup> Annual Society for American Archaeology Meetings. Honolulu, HI, April 4.

- 2013 **Crabtree, Stefani.** Constructing Communities: Examining Household Aggregation in the American Southwest. 78<sup>th</sup> Annual Society for American Archaeology Meetings. Honolulu, HI, April 6.
- 2013 Harris, Kathryn, **Stefani Crabtree.** A Neutral Model of Stone Raw Material Procurement.. 78<sup>th</sup> Annual Society for American Archaeology Meetings. Honolulu, HI, April 5.
- 2012 **Crabtree, Stefani** *Invited Presenter.* Studying Archaeological Foodwebs in Ancestral Puebloan Society. Paper in symposium at CUNY Human Ecodynamics Research Center 2012 Open Workshop in Sustainability Science and Education. New York, NY, October 15.
- 2012 **Crabtree, Stefani.** Exchange, Alliances and Aggregation on the Colorado Plateau. 77<sup>th</sup> Annual Society for American Archaeology Meetings. Memphis, TN, April 22.
- 2012 Reese, Kelsey M., R. Kyle Bocinsky, Kay E. Barnett, **Stefani A. Crabtree**, Elise E. Alonzi, Andrew R. Steier, Donna M. Glowacki, Timothy A. Kohler. Large, Aggregated Villages in Little Soda Canyon. 77<sup>th</sup> Annual Society for American Archaeology Meetings. Memphis, TN, April 21.
- 2012 **Crabtree, Stefani,** Lydia Smith, Timothy A. Kohler. “Trophic Interconnectedness in Southwestern Colorado: Studying Archaeological Food Webs in Ancestral Puebloan Society.” 64<sup>th</sup> annual American Association for the Advancement of Science. Vancouver, BC. February 18. *See also awards.*
- 2011 Donna Glowacki, Timothy Kohler, Kay Barnett, R. Kyle Bocinsky, **Stefani Crabtree,** Kelsey Reese, Elise Alonzi, and Andrew Steier. Large Villages in Upper Soda Canyon: an update on VEP field work.” 2011 Pecos Conference, Arizona. August 7.
- 2011 **Crabtree, Stefani,** Denton Cockburn, Ziad Kobti, Timothy A. Kohler. Archaeology Time Machine: Witnessing Social Interactions on the Pueblo Landscape through Agent-based Simulation. Paper in symposium at 76<sup>th</sup> Annual Meeting Society for American Archaeology. Sacramento, CA. April 3.
- 2011 **Crabtree, Stefani.** “There is No Such Thing as a Free Lunch: Costly Exchange in the Village Ecodynamics Project: A Network Analysis.” 64<sup>th</sup> annual Northwest Anthropological Conference. Moscow, ID. April 22.
- 2011 Kohler, Timothy A., R. Kyle Bocinsky, **Stefani Crabtree,** and Denton Cockburn. The Village Ecodynamics Project: Modeling the Deep Pueblo Past. Paper in Symposium Modeling Across Millennia: Interdisciplinary Paths to Ancient Socionatural Systems. Paper in symposium at 177<sup>th</sup> AAAS Annual Meeting, Washington, D.C. February 20.

- 2010 **Crabtree, Stefani**, Timothy Kohler. Alliance Formation and Breakdown: Networks in the Village Ecodynamics Project. 109<sup>th</sup> Annual Meeting of the American Anthropological Association. New Orleans, LA. November 19.
- 2010 **Crabtree, Stefani**, Timothy Kohler, R. Kyle Bocinsky, Ben Ford. Modeling or Simulation? Assessing settlement patterns—real and modeled—in the VEP World. Paper in symposium at 75<sup>th</sup> Annual Meeting Society for American Archaeology, St. Louis, MO. April 15.

### **Symposia Organized**

- 2018 Beyond Centrality: Bridging Network Approaches through Archaeological Narratives. Society for American Archaeology. Washington, D.C., April.
- 2017 Data, Theory, Methods, and Models. Approaching Anthropology and Archaeology through Computational Modeling. Computer Approaches and Quantitative Applications in Archaeology. Atlanta, GA, March 15.
- 2016 Complex systems simulations in archaeology. Can You Model That? Applications of Complex Systems Simulation to Explore the Past. Computer Approaches and Quantitative Applications in Archaeology. Oslo, Norway, March 30.
- 2015 Social networks, disasters, and human resilience: perspectives from the four fields of anthropology. 114<sup>th</sup> Annual Society for the American Anthropological Association Meetings. Denver, CO., November 16.
- 2015 Simulating Social Complexity to Understand the Archaeological Past. 80<sup>th</sup> Annual Society for American Archaeology Meetings. San Francisco, CA. April 16.
- 2012 Socionatural Systems in the Northern U.S. Southwest: A Village Ecodynamics Project II Progress Report. 77<sup>th</sup> Annual Society for American Archaeology Meetings. Memphis, TN, April 21.
- 2011 Modeling Across Millennia: Interdisciplinary Paths to Ancient Socio-natural Systems. AAAS Annual Meetings. Washington, DC. February 20.

### **Discussant**

- 2018 Anthropology's contributions to interdisciplinary graduate training, research, and education. 117<sup>th</sup> annual meeting of the American Anthropological Association. San Jose, CA.
- 2018 The nuts and bolts of agent-based modelling for archaeological science. 84<sup>th</sup> Annual Society for American Archaeology Meetings, Washington, D.C. April.

2017 Modeling Agro-Pastoralism in Eurasia. 83<sup>rd</sup> Annual Society for American Archaeology Meetings, Vancouver, BC. April 1.

### **ARCHAEOLOGICAL AND ETHNOGRAPHIC FIELD EXPERIENCE**

United States: Southwest (Mesa Verde National Park), Rocky Mountain West (Colorado, Wyoming), Great Plains (North Dakota, South Dakota, Eastern Montana, Wyoming), Great Basin (Eastern Oregon, Eastern Washington)

Foreign: Mongolia, France, New Zealand, Samoa, India, Vietnam, Australia

### **FORMAL INTERNATIONAL EDUCATION AND SCIENTIFIC SCHOOLS**

2012-2016	Université de Franche-Comté, Besançon, France.
2011	Santa Fe Institute Complex Systems Summer School. Santa Fe, NM.
2011	São Paulo Advanced Science School on Ecological Networks. São Pedro, Brazil
2005	Hanoi Language School, Vietnam.
2002-2003	Université Paris IV, Sorbonne, Paris, France.

### **LANGUAGES**

English: Native

French: Fluent (speaking, reading and writing)

Spanish, Italian, Vietnamese: Speaking and reading knowledge

### **COMPUTER SKILLS**

Languages: Java, R, NetLogo

Applications: ArcGIS, QGIS, Adobe Illustrator, Photoshop

Statistical Packages: R, Stata

Modeling Frameworks: RePAST (Java), NetLogo

Operating Systems: Mac OS X, Windows

### **PROFESSIONAL AFFILIATIONS**

Society for American Archaeology

American Association for the Advancement of Science

American Anthropological Association

Arizona Archaeological and Historical Society

Complex Systems Society

