

## CURRICULUM VITAE

Isaac I. T. Ullah  
**Department of Anthropology**  
San Diego State University  
5500 Campanile Drive  
San Diego, CA 92182-6040  
(619) 594-594-7296  
[iullah@sdsu.edu](mailto:iullah@sdsu.edu)  
[isaacullah.github.io](http://isaacullah.github.io)

### EDUCATION

2013	<b>Arizona State University</b>
PhD	Anthropology
2003	<b>University of Toronto</b>
MA	Anthropology
2001	<b>University of California, Davis</b>
BS	Anthropology

### TEACHING AND RESEARCH POSITIONS

Fall 2019 – Present	<b>Associate Professor</b>
San Diego State University	Anthropology
Fall 2016 – Spring 2019	<b>Assistant Professor</b>
San Diego State University	Anthropology
Fall 2014 – Summer 2016	<b>Postdoctoral Research Scholar</b>
Arizona State University	Anthropology
Fall 2013 – Summer 2014	<b>Visiting Scholar</b>
University of Pittsburgh	Anthropology
Fall 2012 – Spring 2013	<b>Visiting Assistant Professor</b>
University of Notre Dame	Anthropology
Fall 2010, Fall 2011	<b>Adjunct Professor</b>
Mesa Community College	Cultural Sciences

**Books and Monographs**

1. 2017. **Ullah, I.I.T.** *The consequences of human land-use strategies during the PPNB-LN transition: a simulation modeling approach.* Arizona State University Anthropological Research Papers, v.60. Arizona Board of Regents, Tempe. 177p.

**Book contracts in progress**

1. Freeman, J. and **Ullah, I.I.T.** *Complex and Non-linear Models in Archaeology: A Review.* Manuscript proposal accepted for the Society for American Archaeology Press, “Current Perspectives” Series. Proposal accepted: 08/15/2018. Manuscript due date: 12/01/2019.

**Refereed Journal Articles**

1. 2020. Elsayah, S., Filatova, T., Jakeman, A.J., Kettner, A.J., Zellner, M.L., Athanasiadis, I.N., Hamilton, S.H., Axtell, R.L., Brown, D.G., Gilligan, J.M., Janssen, M.A., Robinson, D.T., Rozenberg, J., **Ullah, I.I.T.**, Lade, S.J. *Eight grand challenges in socio-environmental systems modeling.* Socio-Environmental Systems Modelling, 2, 16226. <https://doi.org/10.18174/sesmo.2020a16226>
2. \*2019. Phukan, A., Braje, T.J., Rockwell, T.K., **Ullah, I.I.T.** *Shorelines in the Desert: Mapping Fish Trap Features along the Southwest Coast of Ancient Lake Cahuilla, California.* Advances in Archaeological Practice, 1–12. <https://doi.org/10.1017/aap.2019.31>
3. \*2019. Chesson, M.S., **Ullah, I.I.T.**, Iiriti, G., Forbes, H., Lazrus, P.K., Ames, N., Garcia, Y., Bencheikroun, S., Robb, J., Wolff, N.P.S., Squillaci, M.O. *Archaeology as Intellectual Service: Engaged Archaeology in San Pasquale Valley, Calabria, Italy.* Archaeologies. <https://doi.org/10.1007/s11759-019-09376-5>
4. \*2019. Chesson, M.S., **Ullah, I.I.T.**, Aimes, N., Bencheikroun, S., Forbes, N., Garcia, Y., Iiriti, G., Lazrus, P.K., Robb, J., Squillaci, M.O., and Wolff, N.P.S. *Laborscapes and Archaeologies of Sustainability: Early Globalization and Commercial Farming in the San Pasquale Valley, Calabria, Italy from 1800 – 2018.* Journal of Mediterranean Archaeology, 32(1):32-62. <http://dx.doi.org/10.1558/jma.39327>
5. 2019. **Ullah, I.I.T.**, Chang C., and Tourtellette, P. *Water, dust, and loess: co-evolution of landscapes, farming, and human society in southeastern Kazakhstan during the mid- to late Holocene.* The Journal of Anthropological Archaeology, 55:1-17. <https://doi.org/10.1016/j.jaa.2019.101067>
6. 2018. Robinson, D.T.; Di Vittorio, A.; Alexander, P.; Arneith, A.; Barton, C.M.; Brown, D.G.; Kettner, A.; Lemmen, C.; O'Neill, B.C.; Janssen, M.; Pugh, T.A.M.; Rabin, S.S.; Rounsevell, M.; Syvitski, J.P.; **Ullah, I.I.T.**, and Verburg, P.H. *Modeling feedbacks between human and natural processes in the land system.* Special Issue: “Social dynamics and planetary boundaries in Earth system modelling.” Earth System Dynamics, 9, 895–914. <https://doi.org/10.5194/esd-9-895-2018>
7. 2018. Banning, E.B., Hitchings, P., Abu Jayyab, K., **Ullah, I.I.T.**, Rhodes, S., Yasui, E., Gibbon, E., Handziuk, N., Glasser, A. *Jawafat Shaban and the Late Neolithic in Wādī Al-Bîr, Northern Jordan.* Paléorient, 44(1). 57-74.
8. 2016. Barton, C.M., **Ullah, I.I.T.**, Bergin, S.M., Sarjoughian, H.S., Mayer, G.R., Bernabeu Auban, J.E., Heimsath, A.M., Acevedo, M.F., Riel-Salvatore, J.G., and Arrowsmith, J.R. *Experimental socioecology: integrative science for Anthropocene landscape dynamics.* Anthropocene, 13:34-45. [10.1016/j.ancene.2015.12.004](https://doi.org/10.1016/j.ancene.2015.12.004).
9. 2015. **Ullah, I.I.T.**, Kuijt, I., and Freeman, J.F. *Toward a theory of punctuated subsistence change.* Proceedings of the National Academy of Sciences, 112(31):9579–9584.
10. 2015. **Ullah, I.I.T.** *Integrating older survey data into modern research paradigms: Identifying and correcting spatial error in “legacy” datasets.* Advances in Archaeological Practice, 3(4):331-350.
11. 2015. Barton, C.M., **Ullah, I.I.T.**, and Heimsath, A. *How to make a Barranco: Modeling socioecological dynamics of landscape change in the Mediterranean.* Land, special issue: “Agent-Based Modelling and Landscape Change.” 4(3), 578-606.

12. 2015. **Ullah, I.I.T.**, Duffy, P.R., and Banning, E.B. *Modernizing spatial micro-refuse analysis: New methods for collecting, analyzing, and interpreting the spatial patterning of micro-refuse from house-floor contexts.* Journal of Archaeological Method and Theory. 22(4):1238-1262.
13. 2012. Barton, C.M., **Ullah, I.I.T.**, Bergin, S.M., Mitsova, H., and Sarjoughian, H. *Looking for the future in the past: Long-term change in socioecological systems.* Ecological Modeling, special issue: "Modeling Across Millennia." 241:42-53.
14. 2011. **Ullah, I.I.T.** A GIS method for assessing the zone of human-environmental impact around archaeological sites: a test case from the Late Neolithic of Wadi Ziqi, Jordan. Journal of Archaeological Science. 38(3):623-632.
15. 2010. Barton, C.M., **Ullah, I.I.T.**, and Bergin, S. *Land use, water and Mediterranean landscapes: Modelling long-term dynamics of complex socio-ecological systems.* Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences. 368(1931):5275 -5297.
16. 2010. Barton, C.M., **Ullah, I.I.T.**, and Mitsova, H. *Computational modeling and Neolithic socioecological dynamics: A case study from Southwest Asia.* American Antiquity. 75(2):364-386.

#### **Book Chapters Submitted**

1. Barton, C.M., **Ullah, I.I.T.**, Gauthier, N., Miller, N., Snitker, G., Esteban, I., Bernabeu, J., and Heimsath, A. "Digital proxies for validating models of past socio-ecological systems in the Mediterranean Landscapes Dynamics Project." In: Bergin, S. and Pardo-Gordo, S. (Eds.), Modeling the spread of agriculture: the application of computational modeling techniques to the Neolithic transition. Status: chapter submitted to editors 09/06/20 for initial editorial review. Peer review to follow. Expected publication in 2021.

#### **Journal Articles in Progress**

2. \***Ullah, I.I.T.**, Chesson, M.S., Lazrus, P.K., Garcia, Y., Aimes, N. "Historic erosion protection infrastructure change in the San Pasquale Valley, California." Intended for Anthropocene. Status 80% complete. Intended for submission in Summer 2020.
3. **Ullah, I.I.T.** and Arkan, B. *Computer-based simulation of surface-processes, and digital reconstruction of paleoenvironment during the Early Bronze Age-I at Arslantepe-Malatya, Eastern Turkey.* Intended for Geoarchaeology. Status 80% complete. Intended for submission in Summer 2020.
4. \*Zuaner, Yesenia and **Ullah, Isaac I.** *Remote sensing approaches to detecting and quantifying erosion of archaeological sites in California.* Intended for submission to Geosciences Status: 25% complete, intended for submission in Summer 2020.
5. \*Koples, Miriam, and **Ullah, Isaac I.** *A simulation modeling approach to understanding anthropogenic extinction.* Intended for submission to Ecological Modeling Status: 75% complete, intended for submission in Summer 2020.
6. Barton L. and **Ullah, I.I.T.** *A dynamic behavioral ecology model of early domestication processes.* Intended for Journal of Anthropological Archaeology. Status: 20% complete. Intended for submission in 2020.

#### **Refereed Book Chapters**

1. 2015. Sarjoughian, H., Mayer, G., **Ullah, I.I.T.**, and Barton, C.M. *Managing Hybrid Model Composition Complexity: Human-Environment Simulation Models.* In: Levent Yilmaz (Ed.), Concepts and Methodologies for Modeling and Simulation. Springer International, Cham.
2. 2013. Mitsova, H., Barton, C.M., **Ullah, I.I.T.**, Hofierka, J., and Harmon, R.S., *GIS-based soil erosion modeling.* In: Treatise in Geomorphology, Vol. 3: Remote Sensing and GIScience in Geomorphology. Academic Press, San Diego. pp. 228-258.
3. 2012. **Ullah, I.I.T.**, and Bergin, S.M. *Modeling the consequences of village site location: Least cost path modeling in a coupled GIS and agent-based model of village agropastoralism in eastern Spain*, in: White, D.A.,

Surface-Evans, S.L. (Eds.), Least Cost Analysis of Social Landscapes: Archaeological Case Studies. University of Utah Press, Salt Lake City, pp. 155–173.

4. 2012. **Ullah, I.I.T.** *Particles from the past: microarchaeological spatial analysis of ancient house floors*. In: Parker, B.J., Foster, C.P. (Eds.), New Perspectives in Household Archaeology. Eisenbrauns, Winowna Lake, pp. 123–138.

### **Refereed Computer Software**

1. 2015. Barton, C.M., **Ullah, I.I.T.**, Mayer G., Bergin, S., Sarjoughian, H., and Mitsova, H. *MedLand Modeling Laboratory v.1* - A hybrid modeling environment that couples an agent-based model of small-holder agropastoral households and a cellular landscape evolution model that simulates changes in erosion/deposition, soils, and vegetation. Retrieval from: CoMSES Computational Model Library, [www.openabm.org/model/4609/version/1](http://www.openabm.org/model/4609/version/1).

### **Non-refereed Articles in Professional Publications**

1. 2017. Marwick, B., d'Alpoim Guedes, J., Barton, C.M., Bates, L.A., Baxter, M., Bevan, A., Bollwerk, E.A., Bocinsky, R.K., Brughmans, T., Carter, A.K., Conrad, C., Contreras, D.A., Costa, S., Crema, E.R., Daggett, A., Davies, B., Drake, B.L., Dye, T.S., France, P., Fullagar, R., Giusti, D., Graham, S., Harris, M.D., Hawks, J., Heath, S., Huffer, D., Kansa, E.C., Kansa, S.W., Madsen, M.E., Melcher, J., Negre, J., Neiman, F.D., Opitz, R., Orton, D.C., Przystupa, P., Raviele, M., Riel-Salvatore, J., Riris, P., Romanowska, I., Strupler, N., **Ullah, I.I.T.**, Van Vlack, H.G., Watrall, E.C., Webster, C., Wells, J., Winters, J., Wren, C.D.,. *Open Science in Archaeology. The SAA Archaeological Record*. 17(4):8-14.
2. 2015. Banning, E.B., Gibbs, K., **Ullah, I.I.T.**, Hitchings, P., Abu Jayyab, K., Edwards, S., and Rhodes, S. *Archaeological Excavations in Wadi Quseiba and Wadi al-Bîr, northern Jordan*. Antiquity Project Gallery. 344. <http://antiquity.ac.uk/projgall/508>.
3. 2013. Banning, E.B., Hitchings, P., Abu Jayyab, Elendari, R., K. Gibbs, K., Jablonkay, D., Al Jarrah, H., Letham, B., Razzaz, S., **Ullah, I.I.T.**, and Weston, R. *2013 Archaeological survey in Wadi Qusayba and the Mandah Plateau, Irbid Region, Jordan*. Annual of the Department of Antiquities of Jordan. 57:463-475.
4. 2009. **Ullah, I.I.T.** *Within-room spatial analysis of activity areas at Late Neolithic Tabaqat Al-Buma, Wadi Ziqlab, Al Koura, Jordan*. In: Studies in the History and Archaeology of Jordan, X. The Department of Antiquities of Jordan, Amman, pp. 87-95.

### **Technical Reports**

1. \*2017. Loucks, V., Navarro, S., and **Ullah, I.I.** *Lemon Grove Trees Digitization Project*. Final report filed with the City of Lemon Grove, and the SDSU Sage Project.
2. 2014. Banning, E.B., Abu Jayyab, K., Elendari, R., Gibbs, K., Hitchings, P., Hosseinmardi, G., Jablonkay, D., Al Jarrah, H., Letham, B., Razzaz, S., Rhodes, S., **Ullah, I.I.T.**, and Velgakis, J., and Weston, R. *Archaeological excavations in Wadi Quseiba and Wadi al-Bîr, northern Jordan, 2014*. Report on file with the Department of Antiquities of Jordan, Amman.
3. 2012. **Ullah, I.I.T.** *Chapter IIb - Neixon 2011, Artifact density studies*, in: Fábregas Valcarce, R., Bonilla Rodríguez, A. (Eds.), Boiro: 5000 Anos De Cambio Climático E Explotación Do Medio No Marco De Arousa Norte Sondaxes Arqueolóxicas. E Labores De Restauo No Complexo Dos Castros Do Neixón (The Concello De Boiro and Centro Arqueolóxico Do Barbanza), Memoria Técnica. The Concello de Boiro and Centro Arqueolóxico do Barbanza.
4. 2008. **Ullah, I.I.T.**, Schuldenrien, J., and Smith, M. *Preliminary report of the 2008 season of the Wadi Hasa Ancient Pastoralism Project*. Report on file with the Department of Antiquities of Jordan, Amman.

### **Professional Symposia Organized**

1. 2019. *Agro-pastoral Adaptations to Holocene Climate Change in the Greater Near East*. 84<sup>th</sup> Annual Meeting of the Society for American Archaeology. Albuquerque, NM. Conveners: Bulent Arikan and **Isaac I. Ullah**.
2. 2018. *Theory, method, data, and the anthropological archaeology of Mesoamerica: Papers in honor of Joseph W. Ball*. 83<sup>rd</sup> Annual Meeting of the Society for American Archaeology. Washington, DC. Conveners: **Isaac I. Ullah** and Geoffrey Braswell.
3. 2017. *Modeling Agro-Pastoralism in Eurasia*. 82<sup>nd</sup> Annual Meeting of the Society for American Archaeology. Vancouver, BC. Conveners: **Isaac I. Ullah** and Claudia C. Chang.
4. 2016. *Advances in Integration of Earth System Dynamics and Social System Models*. 2016 Fall Meeting of the American Geophysical Union in San Francisco, CA. Conveners: Kimberly G Rogers, **Isaac I. Ullah**, Albert J. Kettner, Mark D.A. Rounsevell.
5. 2012. *Socio-natural systems in pastoral and agro-pastoral societies: Archaeological investigations of pastoral landscapes*. 77<sup>th</sup> annual meeting of the Society of American Archaeology in Memphis, TN. Conveners: **Isaac I. Ullah** and Claudia C. Chang.

### **Professional Symposia in Preparation**

1. *Roundtable on Community-Driven Reproducible Research: The Community for Modeling Agropastoralism in Eurasia*. to take place at the 9th World Archaeological Congress, July 5th-10th, 2020, in Prague, Czech Republic. Status: Session accepted to WAC9 December, 2019. POSTPONED to Summer 2021 due to COVID-19

### **Conference Papers**

1. \*2019. Garcia, Y, **Ullah, I.I.T.** *Computational Erosion Modeling of San Miguel Island: Preserving Archaeological Sites*. Conference paper presented at the 2019 annual Computing Applications in Archaeology conference. Krakow, Poland, 2019.
2. \*2019. Garcia, Y, **Ullah, I.I.T.** *Using Open Source GIS Software to Address Archaeological Problems: Preserving Sites on San Miguel Island*. Poster presented at the 2019 American Association of Geographers annual meeting, Washington, DC.
3. 2018. Barton, C.M., **Ullah, I.I.T.**, Gauthier, N., Miller, N., Snitker, G., Esteban, I., Bernabeu, J., and Heimsath, A.. *'Digital Proxies' for Validating Models of Past Socio-Ecological Systems in the Mediterranean Landscape Dynamics Project*. Conference paper presented at the 2018 annual meeting of the European Archaeological Association, Barcelona, Spain.
4. 2018. Acevedo, M.F., Boyd, W., Sarjoughian, S., **Ullah, I.I.T.**, and Barton, C.M.. *Integrating socio-environmental models: vegetation, agriculture, and landform dynamics*. The 9th International Congress on Environmental Modelling and Software, Fort Collins, Colorado.
5. 2018. **Ullah, I.I.T.** *Water, erosion, and climate history in the San Pasquale Valley, Calabria, Italy*. The Political Logic of Mediterranean Landscapes: Crafting Communities and Sustainable Futures from the Ground Up, June 28-30, Rome, Italy.
6. \*2018. Chesson, M.S., **Ullah, I.I.T.**, Aimes, N., Forbes, N., Lazrus, P.K., Garcia, Y. Lane, I., Gauthier, N., Wolff, N.P.S., Robb, J.E., and Ruben, I. *Laborscapes and Archaeologies of Sustainability: An Early Technoscape of Commercial Farming in the San Pasquale Valley, Calabria, Italy from 1800 – 2018*. The Political Logic of Mediterranean Landscapes: Crafting Communities and Sustainable Futures from the Ground Up, June 28-30, Rome, Italy.
7. \*2018. **Ullah, I.I.T.**, Garcia, Y., Lazrus, P.K., Ames, N., and Chesson, M.S. *Historic Water Management Infrastructure in the San Pasquale Valley, Calabria, Italy*. Symposium: "A Mediterranean World, 6000 BC—AD



- 2000: Archaeology and History of Bova Marina, Italy.” 83<sup>rd</sup> Annual Meeting of the Society for American Archaeology, Washington, DC.
8. 2018. Chesson, M.S. , **Ullah, I.I.T.**, Ames, N., Forbes, H., and Lazrus, P.K.. *Full of Water, Full of life: Water, Sustainability and Built Heritage in the 19th to 21<sup>st</sup> centuries San Pasquale Valley, Calabria, Italy.* Symposium: “A Mediterranean World, 6000 BC—AD 2000: Archaeology and History of Bova Marina, Italy.” 83<sup>rd</sup> Annual Meeting of the Society for American Archaeology, Washington, DC.
  9. 2018. **Ullah, I.I.T.** *Open source digital data collection for field sciences.* 2018 Southern California Linux Expo (SCaLE16x), Pasadena, CA.
  10. 2018. **Ullah, I.I.T.** *Going paperless in Calabria: an open-source digital data collection workflow.*” Symposium “Going Paperless: The Digital Age of Archaeology.” 2018 Society for Historical Archaeology Conference, New Orleans, LA.
  11. 2017. **Ullah, I.I.T.** *Coupled Human-Earth Systems Models and the “Digital Proxy Record:” Connecting the Human and Natural.* Community Surface Dynamics Modeling System Annual Meeting. “Modeling Coupled Earth and Human Systems - The Dynamic Duo.” Boulder, Colorado. May 23 -25th 2017.
  12. 2017. Banning, E.B. and **Ullah, I.I.T.** *Percolation Theory and the Effectiveness of Adaptive Sampling in Subsurface Survey.* The Annual Meeting of the Society for American Archaeology, Vancouver, BC. March 27-April 2, 2017.
  13. 2017. Banning, E.B., Hitching, P, Abu Jayyab, K., Rhodes, S, Yasui, E, and **Ullah I.I.T.** *Excavations at a Wadi Rabah Late Neolithic Site in Wadi Quseiba, Northern Jordan.* 2017 meeting of the Archaeological Institute of America, Toronto, ON.
  14. 2016. **Ullah, I.I.T.**, *Traces of complexity: connecting model output with archaeological reality.* Symposium: “Human-Environmental Interactions in the Mediterranean Basin. ” 81<sup>st</sup> Annual Meeting of the Society for American Archaeology, Orlando. FL. April 6–10, 2016.
  15. 2016. **Ullah, I.I.T.**, *Modeling Human-Environment Interaction.* Modeling Socioecological Dynamics: Methods and Case Studies Workshop, Istanbul Technical University, Istanbul, Turkey. March 14–15, 2016.
  16. 2016. **Ullah, I.I.T.**, ‘*Developing the Mediterranean Landscape Dynamics Modeling Laboratory*’. Modeling Socioecological Dynamics: Methods and Case Studies Workshop, Istanbul Technical University, Istanbul, Turkey. March 14–15, 2016.
  17. 2015. **Ullah, I.I.T.**, and Barton, C.M., *Complexity in space and time: spatio-temporal variability and scale in simulations of social-ecological systems.* Symposium: “Simulating Social Complexity to Understand the Archaeological Past.” 80<sup>th</sup> Annual Meeting of the Society for American Archaeology, San Francisco. CA. April 15–19, 2015.
  18. 2014. Gibbs, K., Banning, E.B., **Ullah I.I.**, Hitchings, P., and Abu Jayyab, K. *Late Neolithic Excavations in Wadi Qusayba, Northern Jordan.* 2015 American Schools of Oriental Research Annual Meeting, San Diego, CA.
  19. 2014. **Ullah I.I.** *Computer-based simulation of surface-processes, and digital reconstruction of paleoenvironment during the Early Bronze Age-I at Arslantepe–Malatya, Eastern Turkey.* Symposium: “Environmental Change: Data, Processes, and Integrated Modeling.” 20<sup>th</sup> Annual Meeting of the European Archaeological Association, Istanbul, Turkey. September 10–14, 2014.
  20. 2014. **Ullah I.I.** *From a world of compasses, paper, and pencils to the digital era: how to integrate “pre-GPS” survey data into a modern research paradigm.* Symposium “Paleolithic Paradigms: Papers in Honor of Geoffrey Clark.” 79<sup>th</sup> Annual Meeting of the Society for American Archaeology, Austin, TX. April 23–27, 2014.
  21. 2014. Banning, E.B., and **Ullah I.I.** *In Small Things Miscounted: Problems, Solutions and Opportunities of Scale in Microrefuse Analysis.* Symposium: “Multi-scalar Approaches to Archaeological Interpretation.” 79<sup>th</sup> Annual Meeting of the Society for American Archaeology, Austin, TX. April 23–27, 2014.
  22. 2013. **Ullah, I.I.T.** and Barton, C.M., *Simulating “collapse”: A computational modeling approach to understanding adaptive reorganization in low-level socio-natural systems.* Symposium: “New Directions in

*Modeling Dynamics in Coupled Social-Natural Systems.*” 78<sup>th</sup> annual meeting of the Society of American Archaeology, Honolulu, HI.

23. 2012. **Ullah, I.I.T.**, *Simulating the long-term effects of agropastoral landuse decisions: a computational modeling approach to the Prepottery/Pottery Neolithic transition in northern Jordan.* Symposium: “Socio-natural systems in pastoral and agro-pastoral societies: Archaeological investigations of pastoral landscapes.” 77<sup>th</sup> annual meeting of the Society of American Archaeology, Memphis, TN.
24. 2012. Bergin, S., **Ullah, I.I.T.**, Barton, C.M., and Gravel-Miguel, C., *Human-Environment Interactions in a Changing Environment: A Computational Model of Agropastoral Practices and Landscapes in Neolithic Spain.* Symposium: “Socio-natural systems in pastoral and agro-pastoral societies: Archaeological investigations of pastoral landscapes.” 77<sup>th</sup> annual meeting of the Society of American Archaeology, Memphis, TN.
25. 2011. **Ullah, I.I.T.**, Barton, C.M., Bergin, S., and A. Miller. *Simpler is better: lessons from modeling coupled human and natural systems in the Mediterranean Landscape Dynamics Project.* Symposium “Process and Change in Prehistoric Socio-Natural Systems.” 76<sup>th</sup> annual meeting of the Society of American Archaeology, Sacramento, CA.
26. 2011. Bergin, S., **Ullah, I.I.T.**, Arikan, B., Barton, C.M., Sarjoughian, H., and G. Mayer. *Simulating Neolithic Landscape Dynamics: A Coupled ABM-GIS Model of Agro-Pastoral Systems in Eastern Spain.* Symposium: “Process and Change in Prehistoric Socio-Natural Systems.” 76<sup>th</sup> annual meeting of the Society of American Archaeology, Sacramento, CA.
27. 2010. **Ullah, I.I.T.** *A GIS method for assessing the zone of human-environmental impact around archaeological sites: a test case from the Late Neolithic of Wadi Ziqlâb, Jordan.* 2010 Summer Assembly of the University Consortium for Geographic Information Science. Hilton Head Island, SC.
28. 2010. Barton, C. M., **Ullah, I.I.T.**, Mayer, G., Sarjoughian, H., Bergin, S., Miller, A., and H. Mitasova. *Coupled Models for Coupled Systems: Land-Use and Landscape Dynamics in the Mediterranean.* 2010 Annual Meeting of the Association of American Geographers. Washington, D.C.
29. 2010. Bergin, S., **Ullah, I.I.T.**, Barton, C.M., Mayer, G., and H. Sarjoughian. *Coupled ABM-GIS Modeling of Agro-Pastoral Systems in Eastern Spain.* 75<sup>th</sup> annual meeting of the Society of American Archaeology, St. Louis, MO.
30. 2010. **Ullah, I.I.T.** *Assessing the accuracy of microrefuse sampling techniques.* 75<sup>th</sup> annual meeting of the Society of American Archaeology, St. Louis, MO.
31. 2009. **Ullah I.I.** *Particles from the Past: A Diachronic Study of the Spatial Patterning of Microrefuse from Room Floors at Late Neolithic Tabaqat al-Bûma, Northern Jordan.* Household Archaeology in the Middle East and Beyond: Theory, Method and Practice Conference. Feb 19-21, Salt Lake City.
32. 2009. **Ullah, I.I.T.**, Mayer, G.R., Barton, C.M., Sarjougian, H.S. *Ancient Mediterranean landscape dynamics: Hybrid agent and geospatial models as a new approach to socioecological simulation.* Symposium: “Parallel Worlds: Interdisciplinary Agent-Based Models of Socioecological Processes and Complexity.” 73<sup>rd</sup> Annual Meeting of the Society for American Archaeology, Vancouver, BC.
33. 2009. Bergin, S., **Ullah, I.I.T.**, and G. Mayer. *A Coupled ABM-GIS model of small-scale farming.* North American Association for Computational Social and Organizational Sciences Meeting, Tempe, AZ.
34. 2009. **Ullah I.I.** *Ancient Pastoralism and Landscape Change in South Central Jordan.* 74<sup>th</sup> Annual Meeting of the Society for American Archaeology, Atlanta, GA.
35. 2007. **Ullah, I.I.T.**, *Microarchaeology and the Use of Space at the Late Neolithic Farmstead of Tabaqat al-Bûma.* 10<sup>th</sup> International Conference on the History and Archaeology of Jordan, The George Washington University, Washington, DC.
36. 2007. **Ullah I.I.**, and Barton, C.M., *Alternative Futures of the Past: Modeling Neolithic Landuse and Its Consequences in the Ancient Mediterranean.* 72<sup>nd</sup> Annual Meeting of the Society for American Archaeology, Austin, TX.

37. 2006. DiMaggio, E.N., Arrowsmith, J.R., Barton, C.M., Sarjoughian, H.S., Fall, P., Falconer, S.E., and **Ullah, I.I.T.** *Geomorphic Mapping and Paleoterrain Generation for use in Modeling Holocene (8,000 – 1,500 yr) Agropastoral Landuse and Landscape Interactions in Southeast Spain*. 2006 American Geophysical Union annual meeting, San Francisco, CA.
38. 2006. Barton, C.M. and **Ullah, I.I.T.** *Modeling Impacts of Landuse Practices on Mediterranean Landscapes*. 2006 Archaeological Sciences of the Americas Symposium. University of Arizona, Tucson, AZ.
39. 2006. **Ullah, I.I.T.** *GIS and Pastoralists in Beidha, Southern Jordan: Predictive Modeling of Campsite Location*. 2006 Annual Conference of WECSOR/ASOR Pacific Southwest Region, Claremont Graduate University, Claremont, CA.

### **Book Reviews**

1. 2014. **Ullah, I.I.T.** Review of: *Mediterranean Archaeological Landscapes: Current Issues*. Geoarchaeology. 29(2), March/April, 2014.
2. 2007. **Ullah, I.I.T.** Review of: *Human Ecology in the Wadi Al-Hasa: Land Use and Abandonment through the Holocene*. American Anthropologist. 109(1):216.
3. 2002. Gibbs, K., Kadowaki, S., and **Ullah, I.I.T.** *Domesticating Space: Notes on the Toronto Conference*. Neolithics. 1/02:21-22. *Authorship contributions*. 33% of writing, 33% of research.

### **Scholarly Awards**

1. 2010. The University Consortium for Geographic Information Science (UCGIS), Student Paper Award

### **Funded Research Grants, PI**

1. \$10,000 - *Late Holocene Human-Environmental Co-evolution in Southern Kazakhstan*. PI: **Isaac I. Ullah**. University Grants Program, San Diego State University. Acceptance Rate: 35.8% (for the 2016-2017 application year among all submissions), Duration: 2017 – 2018

### **Funded Research Grants, Collaborator/Senior Personnel**

1. \$224,875 - *Large and Small Things Forgotten: Scale and Visibility in Epipaleolithic Cyprus and Neolithic Jordan*. PI's: E.B. Banning and S.T. Stewart. Collaborators: A Simmons, B Letham, C Fulton, DA Macdonald,, **IIT Ullah**, K Gibbs, K Abu Jayyan, LA Maher. Insight grant from the Social Sciences and Humanities Research Council of Canada. Acceptance Rate: 28% (for the 2016-2017 application year among archaeology insight grant submissions). Duration: 2020-2023.
2. \$47,683 - *How and Why do Food Technological Systems Transform?* PI: K. Michelaki. CoI's: M. Peeples, S. Oas, C. Morehart, H. Eakin, J. Wetmore, M. Chesson, P. Lazrus, J. Robb, **I. Ullah**, and T. Braje. ASU School of Human Evolution and Social Change Interdisciplinary Research Grant Program. Duration: 2020-2021.
3. \$142,779 - *Revealing Neolithic Landscapes in Cyprus and Jordan*. PI's: E.B. Banning and S.T. Stewart. Collaborators: A Hawkins, **I.I.T. Ullah**, K. Gibbs, M. Ramsey, S.A. Rich. Insight grant from the Social Sciences and Humanities Research Council of Canada. Acceptance Rate: 28% (for the 2016-2017 application year among archaeology insight grant submissions). Duration: 2017-2020.
4. \$1,300,000 - *The Emergence of Coupled Natural and Human Landscapes in the Western Mediterranean*. PI's: C.M. Barton, S. Sarjoughian, A. Heimsath, M. Acevedo, J. Riel-Salvatore. Senior Personnel: E. Vivoni, J. Bernabeu, **I.I.T. Ullah**. Dynamics of Coupled Natural and Human Systems grant from the National Science Foundation. Acceptance Rate: 18% (for the 2013 application year among all BCS submissions in SBE). Duration: 2013-2018.



5. \$30,000 - *New Perspectives in Archaeology: The Socio-ecological Agent-based Modeling of the Early Bronze Age I of Arslantepe (Malatya)*. PI: B. Arıkan. Foreign Researchers: I.I.T. Ullah, and S. Bergin. Research grant from TUBITAK, The Scientific and Technological Research Council of Turkey, Research and Development Funding Program. Duration: 2014–2016.
6. \$282,000 - *Archaeological Survey and the Neolithic of the Levant*. PI's: E.B. Banning and S.T. Stewart. Collaborator: I.I.T. Ullah. Insight grant from the Social Sciences and Humanities Research Council of Canada. Acceptance Rate: 25.8% (for the 2012-2013 application year among archaeology insight grant submissions). Duration: 2013–2015.

### **Other Significant Research Roles**

1. *Bova Marina Archaeological Research Project*. Position: Co-director of the Historic Households Survey. Current funding: National Endowment for the Humanities, Promotion of Humanities Research grant. PI's: M. Chesson and J. Robb. Funded amount: \$362,533. Duration: 2015–2018.

### **Participation in Professional Associations**

1. Society for American Archaeology (Digital Data Interest Group, Open Science Interest Group, Geoarchaeology Interest Group)
2. Community Surface Dynamics Modeling System (Human-Dimensions Working Group)
3. CoMSES: Network for Computational Modeling in Social and Ecological Sciences
4. CHANS-Net: International Network of Research on Coupled Human and Natural Systems

### **News articles and book reviews highlighting my research and teaching**

1. 2018 Review of “*The Consequences of Human Land-Use Strategies During the PPNB-LN Transition: A Simulation Modeling Approach*.” Alan H. Simmons, Journal of Anthropological Research, 74(2), p276-278.
2. 2017 “Anthropology students use primitive tools funded by Student Success Fee.” Daily Aztec. February 27, 2017.
3. 2016 “Archaeologist shapes the future.” Daily Aztec. September 28, 2016.
4. 2016 “Study looks at long-term impact of farming.” Gizmag. February 1, 2016.
5. 2016 “Long-term study shows impact of humans on land.” Science Daily News. January 27, 2016.
6. 2015 “Analyzing the Neolithic Revolution.” Archaeology Magazine, Online. July 24, 2015.
7. 2015 “New Research Reveals Clues of Neolithic Revolution.” New Historian. July 22, 2015.
8. 2015 “Archaeologists use new methods to explore move from hunting, gathering to farming.” Phys.org. July 21, 2015
9. 2010 “Archaeology Could Benefit from Computer Modeling.” Science 2.0. May 10, 2010.
10. 2010 “Living in the Past and Looking Toward the Future. Archaeologists develop models to explain agricultural history, future.” Chris Gorski, Inside Science, July 29, 2010.

## TEACHING AND MENTORING

### Student Advising and Thesis Committees

#### ***Chair, SDSU Master Students***

1. 2018-present Benchekroun, Sarah. Anthropology. Expected graduation year: Spring 2021.
2. 2018-present Davis, Katherine. Anthropology. Expected graduation year: Spring 2021.
3. 2017-present Garcia, Yesenia. Anthropology. Expected graduation year: Summer 2021.

#### ***Committee Member, Masters Students (\*denotes SDSU MA students)***

1. 2020-present Galena, Natalia. Anthropology. Expected graduation year: 2022
2. 2017-2018 Phukan, Anjali. Anthropology. Graduation year: Spring 2018. Thesis: “*Shorelines in the Desert: Archaeological Survey and Assessment of Fish Traps in the Colorado Desert, Ocotillo Wells State Vehicular Recreation Area.*”
3. 2017-2018 McCain, Joseph. Anthropology. Graduation year: Spring 2018. Thesis: “*Archaeological Investigations of the Coronados Islands, Baja California, Mexico.*”
4. 2016-2017 Hunter, Chelsea. Anthropology. Graduation year: Spring 2017. Thesis: “*Waves of change: politics, ontologies, and the struggle for acceptable marine management in Moorea, French Polynesia*”

#### ***Committee Member, PhD Students (\* denotes SDSU JDP students)***

1. 2019-2020 Kelly, Joshua. JDP in Geophysics, San Diego State University/UCSD Scripps Institution of Oceanography. Expected graduation, Spring 2020.
2. 2017-present Johnson, Phyllis. Anthropology, Vanderbilt University. Expected graduation, Spring 2021.
3. 2016-2019 Ng, Chuenyan. Anthropology, University of Pittsburgh. Graduated Spring 2019.

#### ***SDSU ANTH 499 Special Topics Seminar, Undergraduate Students***

1. 2020 Spring Lovell, Kellen. Topic: “*Anthropogenic sediment studies at Santa Margarita Ecological Reserve*”
2. 2019 Fall Watson, Devin. Topic: “*Ethnomusicology.*” (topic was supervised by Prof. Yale Strom)
3. 2017 Spring Haeckl, Brianna. Topic: “*Future Directions in Computational Archaeology.*”

#### ***SDSU ANTH 798 Special Topics Seminar, Graduate Students***

1. 2019 Fall Benchekroun, Sarah. Topic: “*3D Methods for Documenting Historical Monuments.*”

#### ***SDSU ANTH 495 and ANTH 795 Internships supervised***

1. 2020 Spring City of La Mesa Historic Properties Inventory Update. Undergraduate students: Castro, Karyme; Gerstein, Samuel; Kennedy, Rebekah; Cooper, Doug
2. 2020 Spring San Diego Archaeology Center. Undergraduate student: Lovell, Kellen.
3. 2020 Spring CalTrans Cultural Resources Management. Graduate students: Benchekroun, Sarah; Galena, Natalia

4. 2020 Spring RedTail Environmental. Undergraduate student: White, Gretchen.
5. 2019 Fall City of La Mesa Historic Properties Inventory Update. Undergraduate students: Martinez, Alex; Delmonte, Bianca.
6. 2019 Fall Museum of Man, Material Culture Conservation. Undergraduate students: Fogelberg, Lauren
7. 2019 Spring City of La Mesa Historic Properties Inventory Update. Graduate students: Davis, Katherine.
8. 2019 Spring California State Parks, Liberty Station, Cultural Resources Management. Undergraduate students: Hughes, Geoffery.
9. 2018 Spring Museum of Man, Material Culture Conservation. Undergraduate students: Wiley, Briana.
10. 2018 Fall Cultural Resources Management, Meridian Archaeological, Inc. Undergraduate students: Davis-Mullens, Eduvijes.
11. 2018 Spring SDSU Computational Archaeology Lab. Undergraduate students: Brown, Meagan.
12. 2018 Spring Library Science Internship, The San Diego Archaeological Center. Undergraduate students: Stelpflug, Sarah

#### ***SDSU Student Research Symposium, Posters and Presentations Supervised***

1. 2020 Koples, Miriam. Anthropology, graduate student. Poster: *"A Model Based Approach to Human Impact and Extinction."*
2. 2020 Lovell, Kellen. Anthropology, undergraduate student. Poster: *"Spanish land-use methods on California ecosystems in the Mission and early post-Mission periods."*
3. 2019 Garcia, Yesenia. Anthropology, graduate student. Oral Presentation: *"Computational Erosion Modeling of Archaeological Sites on San Miguel Island."*
4. 2018 Garcia, Yesenia. Anthropology, graduate student. Poster: *"Quantifying a Hundred Years of Landscape Change in the San Pasquale Valley, Calabria, Italy."*
5. 2018 Navarro, Salvador. Anthropology, undergraduate student. Poster: *"The Power of the Earth: Iron Age Burial Mounds and Territoriality in Southeastern Kazakhstan."*

#### **Participation in Teaching Training or Teaching Conferences**

1. August, 2016 SDSU CTL "Syllabus workshop."
2. October, 2016 SDSU CTL "Relevant, reflective, transparent: Creating student-centered assessments."

#### **Teaching and Mentoring Awards**

1. Spring 2018 "Most Influential Faculty," Anthropology.

#### **Curriculum Development and Teaching Innovations**

1. Spring 2020 Participant in the Canvas LMS pilot program for ANTH 302 "Principles of Archaeology"
2. Spring 2018 Faculty facilitator for "Experimental Archaeology Workshop" in collaboration with the Association of Anthropology Students
3. Spring 2018 Development of 11 new video tutorials for ANTH 583 "GIS and Imagery Analysis."

4. Spring 2018 Course Fieldtrip to Old Mission Dam in Mission Trails Regional Park for ANTH 583, "Anthropogenic Landscapes."
5. Spring 2018 Creation of 10 laboratory practicums for ANTH 583 "Anthropogenic Landscapes."
6. Spring 2018 New Course Syllabus for ANTH 583 "Anthropogenic Landscapes."
7. Fall 2017 Submission of new course proposal for ANTH 562 "Computational Archaeology"
8. Fall 2017 Submission of course modification for ANTH 302 "Principles of Archaeology"
9. Spring 2017 SDSU Sage Program collaboration for ANTH 583 "GIS and Imagery Analysis."
10. Spring 2017 Development of 16 video tutorials for ANTH 583 "GIS and Imagery Analysis."
11. Spring 2017 New Course Syllabus for ANTH 583 "GIS and Imagery Analysis."
12. Spring 2017 "How to read scholarly writing" Writing guide for my upper-division course.
13. 2016-2017 Establishment of the Computational Archaeology Lab, HT 62/66.
14. 2016-2017 Development of 12 weekly laboratory assignments, "ANTH 302, Principles of Archaeology."
15. Fall 2016 Faculty facilitator for "Experimental Archaeology Workshop" funded by Student Success Fee.
16. Fall 2016 Redesigned Course Syllabus for ANTH 349: Roots of Civilizations

## **SERVICE**

### **Service for the Department**

1. 2019 – present RTP Committee
2. 2019 – present Professional Leaves Committee
3. 2018 – present Undergraduate Anthropology Major Adviser
4. 2018 – present Peer Review Committee
5. 2016 – present Curriculum Committee
6. 2018 – 2019 Chair, Search Committee for Assistant Professor in the Archaeology of North America.
7. 2017 – 2019 Scholarship Committee

### **Service for the College**

1. 2019 – present CAL Research Committee

### **Service for the University**

1. 2016 – present Member, Center for Climate Change and Sustainability Studies (C2S2) Research Cluster.
2. 2018 Judge, Student Research Symposium.
3. 2017 Faculty participant in the SDSU Sage Project, GIS/Asset Mapping for the City of Lemon Grove, ANTH 583 class.
4. 2017 Judge, Student Research Symposium.

### **Service for the Profession**

1. 2017 – present Organizer of the Community for Modeling Agro-Pastoralism in Eurasia (cmaple.org).
2. 2017 – 2019 Associate Editor, *Frontiers in Digital Humanities: Digital Archaeology*.
3. 2015 – 2017 Review Editor, *Frontiers in Digital Humanities: Digital Archaeology*.

### **Reviewer, academic journals:**

*Journal of Archaeological Research; Advances in Archaeological Practice; Journal of Archaeological Sciences; Computation; Southeast Archaeological Review; Frontiers in Humanities: Digital Archaeology*

### **Reviewer, granting agencies:**

*National Science Foundation*



### ***Professional Workshops Organized***

1. 2015 *Open Source Geospatial Tools for Anthropologists*. (4 sessions, 4 hours each). Invited workshop given at the University of Notre Dame, Department of Anthropology, December 1–4, 2015. Co-organized with M. Sisk of UND Library.
2. 2009 *Paleolandscape Reconstruction and Ancient Human Landuse: A GIS Workshop*. (2 sessions, 8 hours each). Invited workshop given at the University of Toronto Archaeology Center.
3. 2006 *GRASS GIS for Anthropologists*. SHESC Graduate Workshop Series. Fall term, 2006. (2 sessions, 2 hours each). Workshop given at Arizona State University.

### **Service for the Community**

#### ***Community Outreach***

1. 2018-present Commissioner. City of La Mesa, Historic Preservation Commission.

#### ***Invited Public Talks***

1. 2018 *Computational Modeling, Archaeology, and the Anthropocene*. Vanderbilt University, Center for Digital Humanities.
2. 2018 *Connecting the Human and Natural: Coupled Human-Earth Systems Models and the Digital Proxy Record*. Scripps Institute of Oceanography, Scripps Center for Marine Archaeology (SCMA) workshop.
3. 2016 *Coupled Human-Natural System Modeling: Connecting Simulation Output to the Real World*. San Diego State University, Center for Climate and Sustainability monthly talks.
4. 2013 *Simulating the consequences of early farming strategies: a computational modeling approach to understanding long-term socio-ecological dynamics in low-level agropastoral systems*. University of Pittsburgh, Department of Anthropology colloquium series.
5. 2011 *The Neolithic period in Jordan: Daily life in early farming villages*. Mesa Community College Cultural Science brown bag series.