

**Christopher S. Galletti**  
Postdoctoral Research Scientist  
Department of Ecology, Evolution, and Environmental Biology  
Columbia University

**CONTACT**

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**EDUCATION**

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2015 Ph.D. - Arizona State University  
2002 M.Sc. - Stevens Institute of Technology  
1996 B.A. - Rider University

**ACADEMIC POSITIONS AND APPOINTMENTS**

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2017-present Postdoctoral Research Scientist, Department of Ecology, Evolution, and Environmental Biology, Columbia University  
2015-2017 Postdoctoral Fellow, Department of Geography, Dartmouth College  
2010-2015 Faculty Associate, School of Geographical Sciences and Urban Planning, Arizona State University  
2009-2012 Research Assistant, Environmental Remote Sensing and Geoinformatics Lab, Arizona State University

**GRANTS AND FELLOWSHIPS**

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2017 National Science Foundation (in preparation): *Social and Biophysical Drivers of Climate Regulation in New Urbanist and Conventional Suburban Design* (\$337,771), PI: VK Turner (Kent State), Co-PI: CS Galletti (Galletti component: \$166,320)  
2012-2013 Fulbright Grant, Oman; U.S. Department of State: *Global Climate Change and Ecosystem Transition in Dhofar, Oman* (\$37,000)

- 2013 Central Arizona-Phoenix Long Term Ecological Research - Graduate Research Grant: *Modeling albedo with high resolution imagery* (\$3000), PIs: S Kaplan and CS Galletti
- 2012 School of Geographical Sciences and Urban Planning, Arizona State University – Departmental Research Grant: *Broadband Albedo Estimation from Very High Resolution Satellite Imagery* (\$2000) PIs: CS Galletti and S Kaplan
- 2009-2012 Gilbert F. White Fellowship for Environment and Society, Arizona State University
- 2011 Central Arizona-Phoenix Long Term Ecological Research - Graduate Research Grant. *Landscape configuration effects on the urban heat island in Phoenix, AZ* (\$4,000) PIs: J Connors and CS Galletti
- 2010 Arizona State University Graduate and Professional Student Association - Independent Research Grant. *Agriculture in Musandam, Oman* (\$400)

## **PUBLICATIONS**

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### **Peer-Reviewed Journal Articles**

- 2017 Ridder E, **Galletti CS**, Fall PL, & SE Falconer. Economic and social activities on ancient Cypriot terraced landscapes. *Journal of Environmental Management*, <http://dx.doi.org/10.1016/j.jenvman.2016.12.037>
- 2016 **Galletti CS**, Turner II BL, & Myint SW. Land changes and their drivers in the cloud forest and coastal zone of Dhofar, Oman, between 1988 and 2013. *Regional Environmental Change*, in press, DOI: 10.1007/s10113-016-0942-2
- 2016 Kaplan S, **Galletti CS**, Chow WTL, & Myint SW. First order approximation of Broadband Albedo with High Resolution Quickbird Imagery: a case study for arid urban areas. *GIScience and Remote Sensing* 53, 303-319
- 2015 Turner VK, & **Galletti CS**. Do sustainable urban designs generate more ecosystem services? A case study of Civano in Tucson, Arizona, USA. *The Professional Geographer* 67, 204-217 DOI: 10.1080/00330124.2014.922021
- 2015 Hilbert YH, Usik VI, **Galletti CS**, Morley MW, Parton A, Clark-Balzan L, Schwenninger J-L, Linnenlucke LP, Roberts RG, Jacobs Z, & Rose JI. Archaeological evidence for indigenous human occupation of Southern Arabia at the Pleistocene/Holocene transition: The case of al-Hatab Dhofar, Southern Oman. *Paléorient* 41(2), 31-49
- 2015 Hilbert YH, Parton A, Morley MW, Linnenlucke LP, Jacobs Z, Clark-Balzan L, Roberts RG, **Galletti CS**, Schwenninger J-L, & Rose JI. Terminal Pleistocene and Early Holocene archaeology and stratigraphy of the southern Nejd, Oman. *Quaternary International* 382, 250-263

- 2014 **Galletti CS**, & Myint SW. (2014) Land-Use Mapping in a Mixed Urban-Agricultural Arid Landscape Using Object-Based Image Analysis: A Case Study from Maricopa, Arizona. *Remote Sensing* 6, 6089-6110
- 2014 Kane K, Connors JP, & **Galletti CS**. Beyond fragmentation at the fringe: a path-dependent, high resolution analysis of urban land cover in Phoenix, Arizona. *Applied Geography*, DOI: <http://dx.doi.org/10.1016/j.apgeog.2014.05.002>
- 2014 Li X, Myint SW, Zhang Y, **Galletti CS**, Zhang X, & Turner II BL. Object-Based Land-Cover Classification for Metropolitan Phoenix, Arizona, Using Aerial Photography. *International Journal of Applied Earth Observation and Geoinformation*, DOI: <http://dx.doi.org/10.1016/j.jag.2014.04.018>
- 2013 Myint SW, **Galletti CS**, Kaplan S, & Kim WK. Object vs. Pixel: A systematic evaluation in urban environments. *Geocarto International* 28(7), 657-678
- 2013 Connors JP, **Galletti CS**, & Chow WTL. Landscape Configuration and Urban Heat Island Effects: Assessing the relationship between landscape characteristics and land surface temperature in Phoenix, Arizona. *Landscape Ecology* 28(2), 271-283.
- 2013 **Galletti CS**, Ridder E, Falconer SE, & Fall PL. Maxent modeling of ancient and modern agricultural terraces in the Troodos foothills, Cyprus. *Applied Geography* 39, 46-56.
- 2012 Fall PL, Falconer SE, **Galletti CS**, Schirmang T, Ridder E, & Klinge J. Long-term agrarian landscapes in the Troodos foothills, Cyprus. *Journal of Archaeological Science* 39(7), 2335-2347
- 2012 Metson G, Hale R, Iwaniec D, Cook E, Corman J, **Galletti CS**, & Childers D. Phosphorus in Phoenix: a Budget and Spatial Representation of Phosphorus in an Urban Ecosystem. *Ecological Applications* 22(2), 705-721
- 2011 Rose JI, Usik VI, Marks AE, Hilbert YH, **Galletti CS**, et al. The Nubian Complex of Dhofar, Oman: An African Middle Stone Age Industry in Southern Arabia. *PLoS ONE* 6(11)

### **Manuscripts in Preparation or Submitted**

Turner VK & **Galletti CS**. Addressing Climate Change through Design: A Land Systems Science Approach to Assessing Microclimate Regulation in New Urbanist Developments (Accepted)

**Galletti CS**, Li X, & Connors JP. Establishing the relationship between land cover configuration and night time land surface temperatures using spatial regression (Submitted)

**Galletti CS**, Turner VK, & Szell A. Determining Seasonal and Diurnal Variability and Drivers of Land Surface Temperature in Conventional and Planned Neighborhoods Using Spatial Regression (in preparation)

Turner VK, Ortiz J, **Galletti CS**, & Szell A. Comparing lake water quality in conservation and conventional developments using remote sensing analysis (in preparation)

**Galletti CS**. Spatial regression models in remote sensing (in preparation)

**Galletti CS**, & Fall PL. Assessing drivers of degradation and deforestation in the South Arabian Cloud Forest using remote sensing and vegetation surveys (in preparation)

### **Book Chapters and Conference Proceedings**

Forthcoming **Galletti CS**. Climate and Climate Change at Jabal Al-Qara. (Forthcoming in the *Atlas of Omani Mountains*)

Forthcoming **Galletti CS**. Climate and Climate Change at the Western Hajar Mountains. (Forthcoming in the *Atlas of Omani Mountains*)

Forthcoming **Galletti CS**. Climate and Climate Change at the Musandam Mountains. (Forthcoming in the *Atlas of Omani Mountains*)

2010 Parton A, Parker AG, Farrant A, Leng M, Uerpmann H-P, Schwenneger J-L, **Galletti CS**, & Wells J. (2010) An early MIS3 wet phase at palaeolake Aqabah: preliminary interpretation of the multi-proxy record. *Proceedings of the Seminar for Arabian Studies* 40, 267-276

### **INVITED LECTURES**

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2017 Assessing Environmental Impacts Using an Ensemble of Geospatial Analyses. Hunter College, City University of New York, Department of Geography

2017 Uncovering the Building Blocks of Tomorrow's Cities: Contributions from GIScience. East Carolina University, Department of Geography, Planning, and Environment

2016 Assessing the impacts of national policies and rebellion on the environment in Dhofar, Oman: A geospatial perspective. Monmouth University, Department of History and Anthropology

2015 Climate Variability and Land Change in Dhofar, Oman – A tale of monsoons, rebellion, and social change as told by satellites. Oklahoma State University, Department of Geography

## CONFERENCE PAPERS AND PRESENTATIONS

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### Conference Papers and Sessions

- 2017 Getting Down to the Nitty-Gritty: Using Earth Observation Platforms to Assess Neighborhood-Scale Sustainable Urban Land Systems. Association of American Geographers Annual Meeting, Boston, MA.
- 2017 Session Organizer. Sustainable Urban Land Systems - Land Systems Science Symposium. Association of American Geographers Annual Meeting, Boston, MA.
- 2017 Galletti CS, Turner VK. Addressing Climate Change through Design: A Land Systems Science Approach to Assessing Microclimate Regulation in New Urbanist Developments. Department of Geography, Dartmouth College, Hanover, NH
- 2016 Session and Panel Co-Organizer/Chair. Sustainable Urban Form and GeoDesign: Pathways for Healthy and Resilient Cities (II and III). Association of American Geographers Annual Meeting, San Francisco, CA
- 2016 Galletti CS, Turner VK, Szell A. Neighborhood Scale Analysis of Sustainable Urban Forms. Association of American Geographers Annual Meeting, San Francisco, CA
- 2015 Galletti CS. Land use and land cover change in the Dhofar Cloud Forest of Oman. Association of American Geographers Annual Meeting, Chicago, IL
- 2013 Galletti CS. Understanding Environmental Vulnerability in Dhofar's Cloud Forest: Climatic and Anthropogenic Perspectives. Second Annual Fulbright Conference, Oman - U.S. Embassy in Muscat
- 2013 Galletti CS. Understanding Environmental Change in Dhofar, Oman. Fulbright Enrichment Seminar, Rabat, Morocco
- 2012 Turner VK, & Galletti CS. Ecosystem Services in Sustainable Planned Communities. Association of American Geographers Annual Meeting, NY, NY
- 2010 Galletti CS, Myint S, Kaplan S, Kim WK, & Turner II BL. Land cover classification in Central Arizona using high resolution satellite imagery. Global Land Project - Open Science Meeting, Tempe, AZ
- 2010 Galletti CS. Water or geomorphology? Spatial analysis of prehistoric sites in Dhofar, Oman. Seminar for Arabian Studies, London, U.K.
- 2010 Galletti CS. Late Pleistocene Archaeological Predictive Modeling in Dhofar, Oman. Association of American Geographers Annual Meeting, Washington, D.C.
- 2008 Galletti CS, & Rose J. A Remote Archaeology Survey of Northern Oman, 2008. School of Social Sciences Graduate Forum, Oxford Brookes University, Oxford, U.K.

## **Poster Presentations**

- 2014 Kane K, Connors JP, & Galletti CS. Shaping the City: Development Trajectories and Land Cover Patterns in Phoenix, Arizona. CAP-LTER Annual Poster Symposium and All Scientist Meeting, Arizona State University
- 2013 Galletti CS, & Connors JP. Assessing the role of spatial configuration on the relationship between land surface temperatures and land cover. Poster presented at the September 2013 NSF Site Review for CAP-LTER, Arizona State University
- 2012 Turner VK, & Galletti CS. Ecosystem Services in Planned Communities: Do they Deliver? CAP-LTER 14th Annual Poster Symposium and All Scientist Meeting, Arizona State University, Tempe, AZ
- 2012 Connors JP, & Galletti CS. Landscape Composition and Configuration in Phoenix: Implications for Urban Heat Island Effects. CAP-LTER 14th Annual Poster Symposium and All Scientist Meeting, Arizona State University, Tempe, AZ
- 2011 Metson G, Galletti CS., et al. Phosphorus in Phoenix: a budget and spatial analysis of phosphorus in an urban ecosystem. Sustainable Phosphorus Summit, Tempe AZ
- 2011 Metson G, Corman J, Cook E, Hale R, Iwaniec D, & Galletti CS. Nutrient movements in human environment interactions: Phosphorus in Phoenix. CAP-LTER 13th Annual Poster Symposium and All Scientist Meeting, Global Institute of Sustainability, Arizona State University, Tempe, AZ
- 2009 Parton A, Parker A, Farrant A, Leng M, Uerpmann, H-P, Schwenneger J-L, Galletti CS, & Wells J. Evidence for an early MIS3 wet phase from within Southeast Arabia. The Seminar for Arabian Studies, London, U.K.

## **AWARDS**

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- 2015 Travel Award – Arizona State University Graduate College
- 1996 President’s Award, Rider University
- 1991 Eagle Scout

## **TEACHING**

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- 2016-2017 The Physical City, Dartmouth College
- 2016 The Natural Environment, Dartmouth College
- 2009-2015 Global Change, Arizona State University

## **SERVICE**

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2017	Journal Reviewer – Journal of Biogeography
2017	Journal Reviewer – Journal of Flood Risk Management
2017	Journal Reviewer – Earth’s Future
2017	Journal Reviewer – ISPRS International Journal of Geo-Information
2016	Journal Reviewer – Sensors
2015-2016	Journal Reviewer –IEEE Transactions on Geoscience and Remote Sensing
2014-2015	Journal Reviewer –Remote Sensing
2015	Journal Reviewer –International Journal of Digital Earth
2015	Journal Reviewer –Canadian Journal of Remote Sensing
2015	Journal Reviewer –Transactions in GIS
2014	Journal Reviewer –PLoS ONE
2014	Journal Reviewer –Applied Geography
2014	Grant reviewer – CAP-LTER Graduate Research Grants, Arizona State University
2013-2014	Journal Reviewer – Remote Sensing Letters
2013	Journal Reviewer – International Journal of Remote Sensing
2012	Grant reviewer – CAP-LTER Graduate Research Grants, Arizona State University
2010-2011	Secretary – Arizona State University Chapter of the American Society for Photogrammetry and Remote Sensing
2010	Grant reviewer – Arizona State University Graduate and Professional Student Association

## **MEMBERSHIPS**

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Institute of Electrical and Electronic Engineers (Geoscience and Remote Sensing Society)  
American Society for Photogrammetry and Remote Sensing  
Association of American Geographers (Specialty groups: Remote Sensing, Human Dimensions of Global Change)